

Exhibit

2

CONFIDENTIAL

Page 1

1 UNITED STATES DISTRICT COURT
2 SOUTHERN DISTRICT OF FLORIDA

3 CASE NO.: 1:24-cv-00779-JPH-MKK

4 MAX MINDS, LLC,

5 Plaintiff,

6 v.

7 TRIANGLE EXPERIENCE GROUP, INC.,
8 ROBERT EDWARD CLARE, JEFFREY MASE,
9 KEVIN G. MULLICAN and JOHN DOES 1-10,

Defendants.

10 _____/

11
12 Loudoun County, Virginia 20165
Wednesday, 10:05 a.m. - 12:29 p.m.
13 February 19, 2025
14
15
16

17 CONFIDENTIAL

18
19 VIDEO CONFERENCE DEPOSITION OF NICK FERRARA
20

21 Taken on behalf of the Plaintiff before
22 SANDRA GOLDMAN FREDERICKS, Florida Professional
23 Reporter, Notary Public in and for the State of Florida
24 at Large, pursuant to Notice of Deposition of Nick
25 Ferrara in the above cause.

CONFIDENTIAL

Page 2

APPEARANCES VIA VIDEO CONFERENCE:

J. CAMPBELL MILLER, ESQUIRE
JOEL B. ROTHMAN, ESQUIRE (Pro Hac Vice)
SRIPLAW, P.A.
21301 Powerline Road, Suite 100
Boca Raton, Florida 33433
Attorneys for Plaintiff
RAIGHNE C. DELANEY, ESQUIRE
BEAN, KINNEY & KORMAN, PC
2311 Wilson Boulevard, Suite 500
Arlington, Virginia 22201
Attorney for Defendants

ALSO PRESENT:

Brandon Fischer
Jordan Abisror

INDEX

WITNESS	PAGE
NICK FERRARA	
Direct Examination by Mr. Rothman	4
Cross-Examination by Mr. Delaney	91
Certificate of Oath of Witness	96
Letter to Witness Re: Reading	98
Witness Signature Page/Errata Sheet	99

CONFIDENTIAL

Page 3

E X H I B I T S

PLAINTIFF'S

NUMBER	DESCRIPTION	PAGE
Exhibit 1	Expert Report of Nick Ferrara	5
Exhibit 2	Systems and software engineering - Vocabulary	5
Exhibit 3	Declaration of Janna Clare	19
Exhibit 4	Declaration of Robert Clare	20
Exhibit 5	Declaration of Kevin Mullican	21
Exhibit 6	Declaration of Robert Simon	71
Exhibit 7	End User License Agreement	21
Exhibit 8	Source Code License Agreement	22
Exhibit 15	E-mails from Azure DevOps to various recipients	75

CONFIDENTIAL

Page 4

1 Thereupon:

2 NICK FERRARA

3 was called as a witness and, having been first duly
4 sworn and responding, "I do," was examined and testified
5 as follows:

6 DIRECT EXAMINATION

7 BY MR. ROTHMAN:

8 Q. Good morning, Mr. Ferrara.

9 A. Good morning.

10 Q. Have you ever had your deposition taken before?

11 A. I have.

12 Q. How many times?

13 A. About a dozen at this point, I think.

14 Q. Okay. Great.

15 I'm going to be asking you some questions.

16 Since you've had your deposition taken before,
17 have you had it taken remotely like this over Zoom?

18 A. Probably half of those times at this point, I
19 think.

20 Q. Great. Okay. So you probably know how to handle
21 this.

22 Just a reminder, let's try and talk -- not over
23 each other so that the court reporter can get my
24 questions and your answers clearly. All right?

25 A. For sure.

CONFIDENTIAL

Page 5

1 Q. And if there's anything you don't understand, let
2 me know, and we'll repeat it or have it read back.

3 A. Will do.

4 Q. Great.

5 So you have exhibits that we sent and they all
6 have numbers beginning -- in the file names beginning
7 with 001 and 002, et cetera, and I'd like to have you
8 open Exhibit 1, which is entitled "Expert Report of Nick
9 Ferrara", and Exhibit 2, which is a document called
10 "Systems and software engineering - Vocabulary".

11 (Thereupon, the above-referred to documents were
12 premarked as Plaintiff's Exhibit Numbers 1 and 2,
13 respectively, for Identification.)

14 BY MR. ROTHMAN:

15 Q. Let me know when you have -- if you have those
16 open.

17 A. I have them both open.

18 Q. Great. Thank you.

19 So Exhibit 1, is this the expert report that you
20 prepared in the case we're here on today that is dated
21 January 31st, 2025?

22 A. I'll double-check the date for you. Just one
23 moment.

24 Yes, although it looks like some highlighting has
25 been added on a lot of the pages.

CONFIDENTIAL

Page 6

1 Q. Yeah. There might have been some highlights that
2 I put in.

3 Other than the highlights, does it appear to be
4 the expert report that you submitted in this case?

5 A. I think so.

6 Q. Okay, great, and the signature at the bottom of
7 page 26 is yours?

8 A. It is.

9 Q. Okay. It's not indicated to be submitted under
10 penalty of perjury, but is everything contained in this
11 expert report, as far as you know, the truth based on
12 your personal knowledge?

13 A. It is.

14 Q. So we have your CV, which is attached, I'm going
15 to skip over that, and I'd like to start by going to the
16 Executive Summary on page 8 and I want to direct you to
17 paragraph 16, and in the first sentence of paragraph 16,
18 you say, "The record indicates that TEG worked jointly
19 with Max to complete technical work involved in
20 developing the Haptic Federal software."

21 MR. ROTHMAN: Ms. Goldman, haptic is
22 h-a-p-t-i-c.

23 THE COURT REPORTER: Thank you.

24 BY MR. ROTHMAN:

25 Q. Do you see that, Mr. Ferrara?

CONFIDENTIAL

Page 7

1 A. I do.

2 Q. Okay. When you say "the record indicates", what
3 are you referring to?

4 A. So the various materials that I have in my report
5 is probably the easiest way to summarize that.

6 You know, there are -- go ahead. Sorry.

7 Q. No. The -- so you mean Attachment 2 where you
8 list materials that you relied upon in preparing your
9 report?

10 A. Let me look at Attachment 2 again.

11 In general, I think that's true.

12 In other words, all of those documents,
13 that's basically, I think, all the material that were
14 produced to me that I've considered in this case.

15 Q. Okay. Well, so but does Attachment 2 contain a
16 list of all the materials that you considered in
17 connection with preparing your expert report?

18 A. I need to take a look.

19 In general, I think the answer is yes.

20 It is possible certainly there is some things
21 further cited in some of the footnotes in the report
22 that might have (inaudible) my attention.

23 In general, I try and cite the salient points in
24 footnotes and have sort of a comprehensive listing in
25 Attachment 2 of it should be everything, but I mean it's

CONFIDENTIAL

Page 8

1 certainly possible there's things in the footnotes that
2 are relevant to that as well.

3 Q. Okay. So when we're talking about "the record" in
4 paragraph 16, you mean either documents that are listed
5 in Attachment 2 or materials that are cited in footnotes
6 to the report?

7 A. Yeah. I mean I guess I'll clarify that for you.

8 Q. All right.

9 A. You know, when I'm talking about the record, I'm
10 talking about materials that have been produced in this
11 case.

12 Obviously there are other materials such as
13 publications or industry standards that I'm citing to as
14 well, but it's not really part of the record per se.
15 I'm really referring here to materials produced in the
16 case.

17 Q. Okay, but for clarity, all the materials that were
18 produced in the case that you looked at and relied upon,
19 right, are listed either in Attachment 2 or is referred
20 to in footnotes; correct?

21 A. In general, I think that's true. It's certainly
22 possible there's, you know, stuff that just didn't make
23 it into Attachment 2, but as best as I can recall, I
24 think that's what's been produced to me.

25 Q. How did you receive the materials that are listed

CONFIDENTIAL

Page 9

1 in Attachment 2; in other words, did you get sent a link
2 to download them from someone or were you given access
3 to a computer system or were you given paper copies?
4 How did you get them?

5 A. It probably varies for the specific material.

6 You know, I think some of this probably was
7 documents that were e-mailed. I would think some of it
8 also was probably sent via some sort of file sharing
9 site. You know, I don't recall the specifics of the
10 exact transmission medium that was used for each of
11 these as I sit here at this moment.

12 Q. Okay. We -- there's been documents that have been
13 produced in the case by each side.

14 Did you get to choose which documents you would
15 look at or were they just all -- all the ones in
16 Attachment 2 were just provided to you and without your
17 ability to select which ones you wanted and which ones
18 you didn't want?

19 A. Well, I mean I -- my general recollection is I was
20 given, you know, here's a folder of documents or here's
21 a set of documents, and I could just look at all of
22 them.

23 Q. Got it, and who gave you those; do you remember
24 the person?

25 A. No.

CONFIDENTIAL

Page 10

1 Q. Was it an attorney working for the Bean Kinney
2 firm?

3 A. I think that's right. I couldn't tell you who
4 specifically gave me these documents from, you know, six
5 months ago.

6 Q. All right. Do you remember when several --

7 A. No.

8 Q. -- months ago is?

9 A. No.

10 Q. So looking back at your report, you say in the
11 second sentence, "analysis of the parties' source code
12 corroborates TEG's position that it provided key
13 architectural designs that Max used in the development
14 of the Haptic Federal software".

15 Now, if you can turn to Attachment 2, can you
16 identify for me what you're referring to on Attachment 2
17 as the parties' source code that you did analysis of?

18 A. I'm sorry. Attachment 2?

19 Q. Yes, Attachment 2.

20 A. Sorry. I misheard Exhibit 2 for a moment there.
21 Give me a moment to scroll down.

22 Q. Sorry.

23 A. No, no, I -- my bad.

24 Sure.

25 So this is the source code that's listed at the

CONFIDENTIAL

Page 11

1 top of page 1 on Attachment 2, the first section being
2 "TEG Source Code Repository Data", which starts with
3 repository named "aces" and goes down through depository
4 named "VJOC-Client-main" --

5 Q. Okay.

6 A. -- and the source code under the heading "Max
7 Source Code Repository Data", which since there's just
8 four of them, I'll just list them, [REDACTED]

9 [REDACTED]
10 and I think all of those listed in the section under
11 both "TEG Source Code Repository Data" and "Max Source
12 Code Repository Data", those should all be source code
13 repositories.

14 Q. Okay. The ones listed under "Max Source Code
15 Repository Data", the four items there that you read
16 into the record, those you reviewed on the source code
17 review computer that you examined at the offices of Bean
18 Kinney; correct?

19 A. That's correct.

20 Q. Okay. With respect to the ones above that under
21 "TEG Source Code Repository Data", starting with "aces",
22 how did you go about reviewing the source code
23 repository for ACES?

24 A. Can you be more specific?

25 Q. Well, was it something where you were given files

CONFIDENTIAL

Page 12

1 that you downloaded and examined on your own computer or
2 did you go to a facility to review it; how did it come
3 about?

4 A. So I was provided with copies of the repositories
5 for these files and used --

6 Q. Okay.

7 A. -- industry standard tools to be able to review
8 and analyze the source code.

9 Q. Okay. So you did all the analysis in your office,
10 not at a remote location?

11 A. I think that's correct.

12 I think this was all provided to me fairly early
13 on before the parties sort of got into their dispute
14 over the mechanism by which the source code was going to
15 be produced.

16 So I'd have to go back and check, but that's my
17 recollection.

18 Q. Okay. So with respect to ACES, what format was
19 the repository in; was it in Git format or some other
20 format?

21 A. Yeah, I'm pretty sure all of the repositories
22 listed here are Git repositories.

23 THE WITNESS: And for the court reporter, Git
24 is G-i-t.

25 BY MR. ROTHMAN:

CONFIDENTIAL

Page 13

1 Q. Okay. All right, and do you recall -- now, when
2 we talk about a repository, that's actually one of the
3 definitions in Exhibit 2.

4 So is it correct that in footnotes to your report,
5 you refer in a number of places to the standard,
6 "Systems and software engineering -- Vocabulary", that's
7 marked as Exhibit 2 for the definition of terms?

8 A. So just to make sure I understand your question --
9 would you repeat it? I think there were a
10 few (inaudible) --

11 Q. Yeah.

12 A. -- that I'd like a little clarity, please.

13 Q. Is it true you refer throughout your report to
14 definitions of terms contained in "Systems and software
15 engineering -- Vocabulary" marked as Exhibit 2?

16 A. Yes, that's correct, and just to be clear, I've
17 also referred to that as ISO 24765.

18 That's referenced back to the systems ISO
19 international standard.

20 Q. Okay. If I refer to Exhibit 2, you'll know what I
21 mean though; right?

22 A. Sure.

23 Q. Great.

24 So there is a definition in Exhibit 2 of
25 repository, and it's 3.3415.

CONFIDENTIAL

Page 14

1 When you're using the term "repository", are you
2 using that term as it's defined in Exhibit 2?

3 A. You'll have to give me a minute to review the
4 definition.

5 Q. And there are actually bookmarks in the document I
6 sent to many of the terms. If you open the bookmarks
7 panel, you might be able to get there a little quicker.

8 A. Actually you providing the -- oh, yeah, that's
9 fair. Okay.

10 I was going to say, if you just give me the line
11 item number like you did, 3.3415, that was perfectly
12 fine too, and, in fact, I might ask you to do that.

13 Repository is -- oh, no, it is listed out.

14 Okay. Let me just review the definition. So give
15 me a moment.

16 I mean I would say insofar as these sort of more
17 general definitions are consistent with a Git
18 repository, which is a version control management
19 program, and the technology used to store changes to
20 source code over time, I would say that's consistent.

21 Q. Great.

22 Now, it's my understanding that Git repositories
23 will have information contained in them indicating, for
24 example, a name or e-mail address of a person who
25 submitted code into the repository.

CONFIDENTIAL

Page 15

1 Is that your understanding?

2 A. That's generally correct, yes.

3 Q. In the course of your analysis, did you examine
4 the names or e-mail addresses of the people who were
5 submitting code into the Git repositories listed at the
6 top of Attachment 2 to your report?

7 A. I believe I did as part of my review of the code.

8 Q. Okay. Did you make notes about that or keep a
9 record of those names or e-mail addresses anywhere?

10 A. I don't think so, no.

11 Q. Okay. It's my understanding also that when there
12 is a submission or something called a commit to a Git
13 repository, it will also indicate a date that -- or
14 potentially multiple dates if the code is subsequently
15 revised, that the code was submitted to the repository.

16 Is that your understanding?

17 A. That's correct.

18 Q. Okay. Did you take note and memorialize the dates
19 for any of the commits in the repositories listed at the
20 top of Attachment 2?

21 A. I would say yes to that.

22 Q. Okay, and where is that information; did you --
23 'cause I don't see -- with respect to the "aces", which
24 is the first repo (phonetic), did you keep notes as to
25 dates of commit for that one?

CONFIDENTIAL

Page 16

1 A. Give me one moment to check. I might be able to
2 point you to a specific footnote.

3 So in general, I refer you to footnotes 18 through
4 21 in which I refer to commits from particular TEG
5 source code repositories, which are listed in quotes,
6 and I provide both specific files at particular commits
7 as well as dates for those commits.

8 So, for example, in citing to this particular item
9 in footnote 18, that's a TEG source code repository,
10 double quotes, [REDACTED] [REDACTED] [REDACTED]

11 [REDACTED] [REDACTED] [REDACTED]
12 unquote, and then parenthetically, (June 12th, 2018), at
13 a particular line with a parenthetical description after
14 that describing --

15 Q. You're reading -- yeah, you're reading from
16 footnote 18.

17 A. I am, and the point I'm trying to make is if you
18 look, for example, midway through that first line, where
19 it says "e4d4aa", that is the first six characters of a
20 particular commit.

21 That's a typical approach for identifying commits.
22 They are listed commit and colon followed with the path,
23 the particular file in the source code repository, and
24 I've noted parenthetically the date of that particular
25 commit.

CONFIDENTIAL

Page 17

1 Now, I will also note for full context, if you
2 look further down at, for example, footnote 20, where I
3 have "TEG source code repository [REDACTED], at --
4 you know, I'm sorry. That's actually a bad example.

5 There may be one or two here where I've referred
6 to the commits generally because there is something that
7 is broader or might be a commit message, for example,
8 that is specific to the entire commit rather than
9 changes to a certain file.

10 So it is typically listed in my footnotes where
11 I'll just say, you know, at commit hash line and then
12 the six characters of the start of the commit hash ID,
13 and forgive me. I don't know how technical you are. If
14 there's a concept or term I throw in there by reflex,
15 let me know and I can explain it.

16 Q. I definitely will, but I am pretty technical, but
17 if I have questions, I'll let you know.

18 So but let me ask you, going back to the beginning
19 of footnote 18, where you say, "see, for example, TEG
20 source code repository" okay, which item are you
21 referring to listed at the top of Attachment 2?

22 A. The transaction-manager repository.

23 Q. Okay. I see.

24 So item -- the fourth bullet down, --

25 A. Correct.

CONFIDENTIAL

Page 18

1 Q. -- the [REDACTED] ?

2 A. Correct.

3 Q. Okay, and whenever you refer to TEG source code
4 repository, in the footnotes that follow, are you always
5 referring to that transaction-manager item?

6 A. No.

7 Q. Okay. So what is the transaction-manager; what
8 can you tell me about that repository?

9 A. I would have to look back at each one of these to
10 give you a better summary description.

11 There are particular items I've cited to that are
12 relevant here.

13 That is, I recall, a back end component of the
14 software as provided, --

15 Q. Yeah.

16 A. -- and I've cited the particular file's
17 description, but I would have to go back and look at the
18 source code to give you a full explanation.

19 Q. I got it.

20 A. In the repositories, there are README files which
21 provide sometimes some summary indication. Those are
22 probably the easiest way to summarize their
23 functionality, but I don't have those in front of me.

24 Q. Okay. Did you create a file name listing of all
25 of the files in the repositories listed at the top of

CONFIDENTIAL

Page 19

1 Attachment 2?

2 A. I don't think so.

3 Q. Okay. Is that something that you could do?

4 A. As a technical matter, sure.

5 Q. We'll come back and we'll go through some more
6 specifics about that in a moment.

7 So if we go back to middle of page 8, paragraph
8 16, you say that your analysis corroborates TEG's
9 position that it provided key architectural designs.

10 What do you mean by key architectural designs?

11 A. So for this, I would refer you to, I'll give you
12 the exact citation, paragraphs 26 through 29 including
13 29's subcomponents.

14 These are fundamentally the organizational
15 components that are at the heart of how the source code
16 I analyzed operates.

17 Q. Got it. Okay.

18 So I want to ask some other questions about some
19 other documents before we go further.

20 (Thereupon, the below-referred to document
21 was premarked as Plaintiff's Exhibit Number 3 for
22 Identification.)

23 BY MR. ROTHMAN:

24 Q. So Exhibit 3 is a document called "Declaration of
25 Janna Clare".

CONFIDENTIAL

Page 20

1 Did you review that document at all in preparation
2 for your expert report?

3 A. I'm not sure.

4 I know I had seen some of the papers and
5 attachments that have been or some of the attachments
6 that were included as exhibits to the parties' most
7 recent motions. I just don't recall if this is one of
8 them offhand.

9 Q. Okay. I'm asking specifically about the
10 declaration part that begins the exhibit, not about any
11 attachments.

12 A. No, I understand.

13 I think this may have been an attachment to
14 something that was recently provided. I just don't
15 recall for sure. It looks familiar, but I'm not
16 positive.

17 (Thereupon, the below-referred to document
18 was premarked as Plaintiff's Exhibit Number 4 for
19 Identification.)

20 BY MR. ROTHMAN:

21 Q. Okay. What about the "Declaration of Robert
22 Clare" that begins on the second page of Exhibit 4?

23 A. Exhibit 4, give me one moment.

24 I'm not sure.
25

CONFIDENTIAL

Page 21

1 (Thereupon, the below-referred to document
2 was premarked as Plaintiff's Exhibit Number 5 for
3 Identification.)

4 BY MR. ROTHMAN:

5 Q. Okay. What about the "Declaration of Kevin
6 Mullican" that -- in Exhibit 5, that begins Exhibit 5?

7 A. Give me one moment to review the document.

8 I think the answer to that is yes.

9 Q. Okay.

10 A. I think I was provided with this fairly recently.

11 Q. Okay. Did you rely on that for any of the
12 opinions you give in your report?

13 A. No.

14 Although I think it is consistent with my
15 understanding of TEG's position, I don't think this was
16 available. 'Cause this was executed January 30th, I'm
17 not sure if I saw this prior to that, but I think it is
18 consistent with my understanding of TEG's position.

19 (Thereupon, the below-referred to document was
20 premarked as Plaintiff's Exhibit Number 7 for
21 Identification.)

22 BY MR. ROTHMAN:

23 Q. Okay. Exhibit 7 is an "End User License
24 Agreement".

25 Did you review that and rely on it at all in

CONFIDENTIAL

Page 22

1 connection with providing your opinions?

2 A. So you have two questions in there, I think.

3 Could you just repeat it and maybe break that
4 apart for me?

5 Q. Did you review this prior to providing your
6 opinions and did you rely on it?

7 A. I am not sure if I have reviewed it. I don't have
8 a Bates number on this document, so I can't check that
9 one way or the other offhand, and I do not believe I
10 relied on it for any of my technical analysis.

11 (Thereupon, the below-referred to document
12 was premarked as Plaintiff's Exhibit Number 8 for
13 Identification.)

14 BY MR. ROTHMAN:

15 Q. What about the next -- same question for the next
16 document, Exhibit 8, the "Source Code License
17 Agreement".

18 A. Just for my own clarity, the document has a
19 sticker on it that says "Exhibit 8", but the document's
20 also labeled "Exhibit 6".

21 Should I be going by the sticker and the file
22 name?

23 Q. Just don't go with the Exhibit 6 name that's in
24 the middle of the page. It's the same -- it's the
25 Exhibit 8.

CONFIDENTIAL

Page 23

1 A. Okay. So use the file name, the 00 8 as the --

2 Q. Yes, please.

3 A. Okay. All right.

4 I may have seen this. I don't recall when.
5 Obviously I believe I've seen this -- well, I certainly
6 saw this when you sent it ten minutes ago. I don't
7 recall if I saw it before.

8 Again, this document's not Bates numbered. So I
9 can't easily check that.

10 Q. Okay, but you didn't rely on it at all?

11 A. For the technical analysis, I don't think so, no.

12 Q. Okay. Did you rely on any agreements for your
13 analysis?

14 A. I don't think I'm relying on any agreement. I had
15 an understanding of certain agreements, but I think my
16 analysis was all just based straight upon analysis of
17 the source code and the other material cited in the
18 record.

19 Q. So did you find -- in your review of the source
20 code on the review computer in the four repositories
21 listed on Attachment 2 under "Max Source Code Repository
22 Data", did you find any source code that was written by
23 anyone at TEG?

24 A. So that particular question is difficult to
25 answer. Both given the constraints on the review

CONFIDENTIAL

Page 24

1 computer and the fact that the source code has been
2 isolated, it's difficult to do any side by side
3 comparison.

4 I know, if I recall from some of the declarations,
5 that there are references -- or maybe it was from some
6 of the testimony, there are references to pseudo code or
7 other information that was provided. So it would be
8 hard for me to answer that without being able to do a
9 full side by side comparison.

10 Obviously that's separate from my opinion
11 regarding the architectural similarities that are
12 pointed out in my report, but in terms of actual source
13 code, I would need both sets of data on one computer to
14 do any side by side comparison.

15 Q. Understood, but is the answer to the question --
16 considering the constraints of your review, is the
17 answer to the question that you didn't find any source
18 code authored by anyone at TEG on the review computer?

19 A. I don't think I've offered an opinion on that. I
20 think the constraints on that are, you know, I haven't
21 been asked to get into the weeds of where did each line
22 of code come from except insofar as that the
23 architectural similarities, as I've pointed out in my
24 report, are things that are -- well, I'll rephrase.

25 The architectural similarities in the source code

CONFIDENTIAL

Page 25

1 that was on the review computer are the same as the
2 architectural elements that are present in the earlier
3 source code that I've reviewed that was provided by TEG.

4 That I would say is the same and I understand that
5 that might have some bearing on that question.

6 In terms of specific lines of code, I'm not in a
7 position to do that analysis the way the code has been
8 produced at this time.

9 Q. Okay. So your engagement, you were not asked to
10 determine where did the code come from; is that my
11 understanding?

12 A. No, I wouldn't say that.

13 I would say that what I was asked to do was to
14 analyze the source code particularly as it pertains to
15 what's in the record related to what TEG developed
16 vis-à-vis the source code on the review computer.

17 So, you know, in the particular context of what
18 we're looking at here, that is architectural analysis.

19 That is distinct from the question of analyzing
20 individual lines of source code and saying, this line of
21 source code was written by this person or that person.

22 Q. Okay. You used the phrase a moment ago, "what TEG
23 developed"; right?

24 In other words, you were looking at, what did TEG
25 develop that was in my client's source code; right?

CONFIDENTIAL

Page 26

1 A. Well, a couple of things.

2 First and foremost, you said your client's source
3 code.

4 Are we talking about the source code on the review
5 computer?

6 Q. Yes, Max's source code.

7 A. Well, okay, I -- first, again, just to be clear,
8 my -- I'm happy to refer to it as the source code in the
9 review computer, but my understanding is the ownership
10 of that source code is at issue.

11 So just so the record is clear, when we're talking
12 about what you have referred to as Max's source code,
13 I'm only referring here to the source code in the review
14 computer.

15 I have no opinions on the ownership of the source
16 code. Those are legal issues outside the scope of my
17 report just so that's clear for everything.

18 Q. Okay. Agreed.

19 A. With that said, perhaps you could repeat your
20 question just to make sure I give you a complete answer
21 to it.

22 Q. Thank you.

23 So it was not part of what the -- what you did in
24 your analysis to determine whether TEG developed any of
25 the source code on the review computer?

CONFIDENTIAL

Page 27

1 A. Well, I think that's conflating sort of an idea
2 that we're looking at individual lines of source code
3 versus the underlying designs that are used to implement
4 the system.

5 You know, I mean you -- to the extent that the TEG
6 source code implements those designs and those designs
7 are then present later in the source code on the review
8 computer, I'd say that is part of my analysis.

9 To the extent we're talking about looking at each
10 line of code, that's not something that can easily be
11 done based on the constraints that were placed on the
12 review computer, and so, you know, the -- I think,
13 again, the architectural analysis is really what we're
14 talking about in terms of designs that were developed by
15 TEG that then get implemented in the source code on the
16 review computer.

17 Q. Okay, and when you're talking about "designs that
18 were developed by TEG", you were referring to the detail
19 that you put into your analysis beginning at paragraph
20 21 of your report under the heading "Design"?

21 A. In general.

22 Obviously the findings are more specific as you
23 get down into that. That section includes some
24 methodology and some further background, but in general,
25 that is correct.

CONFIDENTIAL

Page 28

1 Q. Okay. So what was it that you determined TEG
2 designed?

3 A. So there is several elements of the architecture
4 that I point to in my report and these are covered in
5 paragraph 29 and its respective subparts.

6 So one element of it is the concept of a single
7 message box or a source of information that is used to
8 distribute messages to all connected users.

9 As I point out, that serves the same function as
10 the board that is in the source code on the review
11 computer.

12 Another is the use of WebSockets as the
13 transmission technology, for lack of a better term, to
14 send and receive data to clients connected to the
15 software, and it -- further, the attachments or rather
16 the components that are used for certain types of media
17 that are stored on the boards or in the message boxes,
18 however you want to phrase it, related to chat and video
19 streaming functionality.

20 The same general organization for how those
21 components are laid out in the software, their purpose
22 and how they interoperate is the same as what's in the
23 source code on the review computer.

24 Q. Okay. So summarizing, one, the architectural
25 concept of a board; two, the use of WebSockets; and

CONFIDENTIAL

Page 29

1 three, the use of components for media such as chat
2 video; is that an accurate --

3 A. I would say it's probably you've gone a little too
4 high level.

5 It's not necessarily, for example, just the
6 architectural concept of the board but how it fits into
7 the system as a whole and how it interoperates with the
8 other components.

9 I think all of how those pieces fit together is
10 centered around the board as part of the architecture as
11 well.

12 Q. Okay. So in the course of your review leading to
13 your opinions in your report, were you given any design
14 or architectural documents that were authored by someone
15 at TEG that laid out these three items?

16 A. I would say this is based on my analysis of the
17 code.

18 I would also say to the extent there are README
19 files or other documentations that are included in the
20 source code, that's relevant too. That provides some
21 overview in some of the components I seem to recall.

22 I don't know that there are other documents beyond
23 that, but my analysis is all based on the source code
24 directly and what's in those repositories.

25 Q. Okay. So there is an item, a vocabulary item, in

CONFIDENTIAL

Page 30

1 in Exhibit 2. It's item 3.1164 called "detailed design
2 description".

3 Did you see anywhere in your review a detailed
4 design description authored by someone at TEG?

5 A. I don't think so.

6 It's not necessarily something that is always
7 produced when you're developing source code, but it -- I
8 don't recall seeing one for this particular project.

9 Q. Did you see any indication that there was ever a
10 detailed design review conducted, which is defined in
11 3.1164?

12 A. That's something that would come typically, I
13 would say, later in the software development process.

14 You know, I think of -- for context, I've had
15 cases where, for example, in the development of software
16 for the healthcare industry, you know, oftentimes, if
17 you're using a software development lifecycle such as
18 those promulgated by the Center for Medicare Services,
19 they'll have specific phases where they say, you're
20 going to do your development, and then there will be a
21 detailed design review phase where, you know, all the
22 documents you've built, which we've required as part of
23 a particular project, are going to be examined.

24 So that happens in some projects based on the
25 specific nature of what's going on and how the

CONFIDENTIAL

Page 31

1 development is being done. That's not necessarily
2 relevant for what we're looking at here.

3 Q. Okay. Did you see any documentation other than
4 what you saw in the source code that laid out the design
5 requirements written by someone at TEG for the three
6 items that you identify?

7 A. I don't know that I've seen anything in terms of
8 requirements for -- we're talking about the items in
9 paragraph 29; right?

10 Q. Yes.

11 A. I don't know that I've seen anything that provided
12 requirements that were written earlier on for that.

13 Certainly all of that code, if you look in the
14 repositories developed between 2017 and 2018, I don't
15 think anything I've seen dates back to that period for
16 specifically those requirements.

17 There's obviously other requirements that are, you
18 know, elsewhere in the record, but I don't think there's
19 anything for that time period.

20 Q. Okay. Did you come across in your review anything
21 that you would describe as a software development plan
22 that included the three items in paragraph 29 that was
23 written by someone at TEG, and the definition of
24 software development plan is at 3.3806.

25 A. Give me one moment to take a look at that; 3.3806?

CONFIDENTIAL

Page 32

1 Q. Uh-huh.

2 A. One moment. Let me take a look.

3 No, but I wouldn't expect to see something like
4 that in a software development plan.

5 Software development plans are typically processes
6 that are described for how the software is going to be
7 developed in terms of where source code will be stored,
8 who's going to work on it, who will have review
9 authority, how a particular branch of the source code
10 might get handled, things of that nature that have more
11 general purpose to how the software is developed.

12 They're not going to be specific to any one
13 particular project's requirements or designs or things
14 like that. They're a higher level document typically.

15 Q. Did you find anything in your review that
16 contained the three items in paragraph 29 written by
17 someone at TEG in the nature of software design
18 description, which is defined in 3.3799?

19 A. I'll take a look at that document.

20 No. I think it's, again, sort of consistent with
21 what I said earlier on the design documents, which are
22 the detailed design description.

23 You know, there's not much in terms of
24 documentation that sets forth sort of the abstract
25 designs.

CONFIDENTIAL

Page 33

1 You know, my analysis and assessment of the source
2 code is based on my training, experience and my
3 background as a system architect and my analysis of the
4 source code primarily.

5 I don't know that I've seen something where this
6 was broken down at the level of some of those kinds of
7 documents except insofar as that there may be
8 documentation in the source code as well.

9 Q. Okay. You talk about documentation in the source
10 code, right.

11 We're talking about comments or notes that are in
12 the source code itself; correct?

13 A. Correct, and I'd include README files in that
14 description as well.

15 Q. And README files. Okay.

16 When you were looking at the code in the repos
17 that are listed at the top of Attachment 2 under "TEG
18 Source Code Repository Data", did you see any comments
19 or README files that were written by TEG employees or
20 contractors?

21 A. I think that's right, but I would have to go back
22 and check the source code to see the history of those
23 files.

24 Certainly there are README files in at least some
25 of these repositories, but I would have to check and

CONFIDENTIAL

Page 34

1 see, looking at the history, who wrote them.

2 Q. Okay, but you don't recall seeing -- sitting here
3 today, you don't recall seeing any that were written by
4 TEG employees or contractors?

5 A. I mean I would say that's my understanding -- my
6 recollection, rather, excuse me, but I would have to go
7 and check.

8 I mean there's a hundred commits or more across
9 these repositories, each of which has its own metadata.
10 I just don't recall the specifics of each one as I sit
11 here.

12 Q. Okay. It's my understanding that the items, the
13 three items in paragraph 29 that you're identifying as
14 being things that TEG developed, right, it's my
15 understanding that in doing your review, that you were
16 looking at the code to determine whether someone from
17 TEG developed those items in paragraph 29, or am I
18 incorrect about that?

19 A. I mean I think that is correct.

20 It is certainly my understanding that the source
21 code was written by TEG. You know, if you're asking
22 more specifically beyond that, who, I would have to
23 check the repository.

24 Q. Okay. So is it your understanding then that the
25 first item in the source code repository list for TEG at

CONFIDENTIAL

Page 35

1 the top of Attachment 2, "aces", is it your
2 understanding that the source code in ACES was written
3 by someone at TEG?

4 A. Well, I guess I should be a little specific here
5 to be safe.

6 So my understanding in general is that the source
7 code we're talking about here in the two, three, four,
8 five, six, seven, eight, nine -- no, I'm sorry, the
9 eight bullet points at the top of Attachment 2 under
10 "TEG Source Code Repository Data" generally are all
11 components of the ACES software.

12 I've tried to refer to it broadly in my report to
13 make it a little easier, but specifically I'm referring
14 to all of those eight bullet points that are at the top
15 of Attachment 2 when I'm talking about the ACES software
16 in that section.

17 Q. Okay. So from "aces", which is the first bullet
18 point, down to "web-video", which is the eighth bullet
19 point, --

20 A. Correct.

21 Q. -- all of these are part of the ACES software?

22 A. When I'm using that term in the report, that's
23 what I'm trying to get at, yes.

24 Q. Okay, and is it your understanding that those
25 first eight items contain source code that was written

CONFIDENTIAL

Page 36

1 by someone at TEG?

2 A. That's my recollection, yes.

3 Q. Okay, and it's your recollection based on what?

4 A. Review of the source code repository data.

5 Q. Okay, and by review of the source code repository
6 data, you mean the person who did the commit to the
7 repo?

8 A. Commits, plural, I think that is correct. I'd
9 have to check and see if there is further data and
10 comments or documentation that might also support that,
11 I don't recall offhand, but at the very least, that
12 would be one source of metadata towards that point,
13 correct.

14 Q. Okay. Did you have some list of TEG personnel
15 that you could refer to when reviewing the commits to
16 identify, oh, this person who did this commit on this
17 date in the ACES software, which is the first one, that
18 person was a TEG employee?

19 A. I would have to go back and check my materials to
20 see if I had a list or something provided.

21 Certainly I have an understanding as to some of
22 the people who are TEG employees, but I don't know that
23 I have a comprehensive list. I'd have to check the
24 materials that I've been provided.

25 Q. Well, I'm trying to understand how you knew, from

CONFIDENTIAL

Page 37

1 looking at the names or e-mail addresses of people who
2 did the commits for the first eight items, that those
3 people were working for TEG at the time. That's what
4 I'm trying to understand, because I thought I heard you
5 say that all of the commits for those first eight items
6 were by TEG people.

7 A. I'm sorry.

8 Q. Did I hear that correctly?

9 A. No, I'm not sure I said it quite like that.

10 Q. Okay.

11 A. I think what I said was that I believe there are
12 commits by individuals who are TEG in there. I seem to
13 recall that.

14 Q. Okay.

15 A. I don't actually know if I can tell you all of
16 them are one way or another. I'd have to look at the
17 source code repository.

18 Q. Okay.

19 A. I certainly have an understanding that the code
20 that TEG provided, I believe they've said that that was
21 code that they developed.

22 I would have to double-check that as well, but I
23 think that is consistent with my review of the
24 repository data, but, again, I don't have it in front of
25 me. I would have to go back and look.

CONFIDENTIAL

Page 38

1 Q. Okay. So do I understand correctly then that it
2 was represented to you by whoever gave you those repos
3 that at least the first eight items at the top of
4 Attachment 2 contain code developed by people at TEG; is
5 that the representation given to you?

6 A. I think when I was initially provided that, when
7 we were discussing what was available for my analysis, I
8 think that's right. I think that's also consistent with
9 my review, as I recall it, looking at the commit
10 histories, and I think those -- I think that was
11 consistent, but, again, I would have to check the
12 repository data.

13 Q. Okay, and when you say you think it was
14 consistent, for example, the metadata for these commits,
15 would they contain e-mail addresses that would indicate
16 that the person who did the commit had an e-mail address
17 @triangleexperiencegroup.com; is that what you mean?

18 A. So when you commit to a source code repository,
19 you're going to have a name and an e-mail.

20 The name and the e-mail may or may not be at a
21 particular organization.

22 There are many times I've seen when people use
23 their -- get accounts on their local computer and they
24 forget they have their local e-mail address put on, so
25 like a Gmail or Hotmail account that -- but it will

CONFIDENTIAL

Page 39

1 still say typically their name.

2 That is the kind of metadata that's usually
3 included with the repository that we're talking about
4 here.

5 Q. Okay. Well, but wouldn't you then have to have
6 been given a list of all the names of the TEG developers
7 in order to match them up with the commits to know that
8 the source code in those commits was written by someone
9 who worked for TEG?

10 A. Well, no, not necessarily.

11 Q. Well, how else would you know?

12 A. Well, you said, would I need to be provided a
13 list.

14 I mean the names of some of these individuals are
15 in the record.

16 Kevin Mullican, obviously I don't need to see --

17 Q. Okay.

18 A. -- his name on a list to know he's associated with
19 TEG.

20 Q. Okay. So you saw Kevin Mullican's name as being
21 one of the names of someone who committed -- who did a
22 commit to the first eight repos?

23 A. It seems correct, but I don't recall as I sit here
24 for sure.

25 Q. Okay. So were there other names that you saw who

CONFIDENTIAL

Page 40

1 you know from the record who committed software in the
2 first eight items?

3 A. Again, I would have to check the repository
4 history. I don't recall all of the entries as I sit
5 here today.

6 Q. Okay. What about the last three items,
7 [REDACTED] [REDACTED] [REDACTED] did you
8 examine those to determine who did the commits?

9 A. For those, I recall looking at the history at one
10 point. I don't recall the specifics of that right now.

11 I think what I was looking at was looking
12 particularly at the initial version to understand the
13 architecture of the software as it existed when it was
14 first checked into those repositories, so at the
15 earliest possible time available.

16 Q. Okay, and did you -- when you looked at those
17 initial commits, did you see that there were names of
18 people committing the software who worked for TEG?

19 A. Again, I would have to go look at the repository
20 history. I don't have their history of their
21 repositories memorized.

22 There's hundreds of entries in these different
23 databases.

24 It's -- you know, it's the sort of thing that you
25 would typically look up looking at the repository

CONFIDENTIAL

Page 41

1 instead of trying to remember.

2 Q. Okay. Just to make things clear, you're not
3 sitting here offering an opinion that TEG or anyone
4 working for TEG wrote source code in any of these
5 repositories at the top of Attachment 2, right; that's
6 not one of your opinions?

7 A. I'm not sure I would say it like that.

8 Certainly I have an understanding that, to start
9 with, I asked for what TEG's preexisting codes that they
10 have available, what was it.

11 Q. Okay.

12 A. So that's the starting point.

13 I would -- I seem to recall, looking at it, that
14 there are commits that are consistent with TEG employee
15 names like Kevin Mullican, I think, perhaps in these
16 repositories. I don't recall all the specifics.

17 You know, that might be an understanding
18 assumption in some of the analysis, but I don't know
19 that I've -- I wouldn't quite phrase it the way that I
20 think you did in your question.

21 Q. Okay. I just want to make sure that we understand
22 the scope of your report because it seems to me that
23 there is a difference -- and correct me if you think I'm
24 wrong, Mr. Ferrara, it seems to me that there's a
25 difference between writing source code and what you say

CONFIDENTIAL

Page 42

1 TEG did in paragraph 29 with those three items.

2 A. I'm sorry. Was that a question?

3 Q. Yeah.

4 Is there a difference between writing source code
5 and what you say TEG did in paragraph 29 with the three
6 items that you've highlighted?

7 A. Yeah. I mean I would say they're both different
8 parts of the software development process. They are --
9 you know, the design process is upstream of the code.
10 You can't write code until you've done some degree of
11 design.

12 Q. Okay. Thank you.

13 If we go back and take a look at, for example,
14 paragraph 22, you're saying --

15 A. Paragraph 22 of which document, please?

16 Q. Of your report, --

17 A. Okay.

18 Q. -- page 11.

19 You say, "I understand from my conversations with
20 TEG".

21 Okay. So who did you have conversations with and
22 when did those conversations take place and how long did
23 they take?

24 Can you start first with who did you speak to?

25 A. I don't know that I recall all the individuals.

CONFIDENTIAL

Page 43

1 Certainly Mr. Mullican was one of them.

2 Q. Okay, and when did you speak to him; most
3 recently, when did you speak to him?

4 A. I mean I don't recall. It's been some months
5 since --

6 Q. Okay.

7 A. -- that initial conversation or conversations.

8 Q. Okay. Did you take notes?

9 A. I don't think so. If I did, it would have been --

10 Q. Okay.

11 A. -- in the form of sort of data that ultimately
12 gets finalized in the report as is.

13 Q. And what do you recall him telling you?

14 A. So my recollection is that he said, in 2017 and
15 2018, he was working on back end source code directed at
16 developing sort of the next version of the software that
17 they had been working with previously, that they were
18 moving to a web-based system, which is going to have a
19 different architecture design for the what I understand
20 was a client-based system, one you would install on a
21 computer that had been the code or the software he'd
22 been previously working with, and he had been working on
23 developing the underlying components of that new
24 software prior to the engagement of Max Minds in, I
25 think, 2019.

CONFIDENTIAL

Page 44

1 Q. Okay. So in paragraph 24, you say that you
2 compared -- first line, "I compared the source code
3 architecture and design of source code that TEG wrote
4 for ACES, TEG's predecessor to the Haptic Federal
5 software, to both early and later versions of the Haptic
6 Federal software developed in mid-2019 and fall 2023,
7 respectively."

8 So can you identify for me the items on
9 Attachment 2 that you compared ACES to?

10 A. Sure.

11 So that's going to be to source code in the --
12 from the review computer.

13 Q. Oh, okay.

14 So how did you do that comparison?

15 A. So -- excuse me one moment.

16 So I reviewed using a technique called Static Code
17 Analysis where you're actually reviewing the code as
18 opposed to running it, read through the files,
19 understood the relationships, understood how the
20 different components interconnect and the system
21 architecture fits together, and I compared that, again,
22 Static Code Analysis to review how the source code
23 worked on the read computer, how the different
24 components connect, the different relationships between
25 them and the different parts of the software that are

CONFIDENTIAL

Page 45

1 involved.

2 Q. Okay. Did you do the comparison simultaneously or
3 did you first review the software on the review
4 computer, the source code on the review computer, and
5 then subsequently review ACES, or did you do it in the
6 other way around, or was it at the same time; how did it
7 happen?

8 A. I would say I reviewed ACES first and then the
9 Haptic Federal software second.

10 Q. Okay, and what was the period of time between your
11 review of ACES and your review of the Haptic Federal
12 software?

13 A. I mean I don't recall specifically.

14 Q. So was it a day, a month, a year; I mean
15 approximately what period of time?

16 A. I mean a few weeks, I suppose, since the initial
17 review.

18 I certainly went back and refreshed myself looking
19 at the source code as I was doing review, and I had my
20 own computer, you know, connected to the -- to my
21 network with access to the source code for my review as
22 I was doing that.

23 So it wasn't like, you know, I had to memorize all
24 of ACES and then go in and look at it. I had
25 information available when I needed to do those

CONFIDENTIAL

Page 46

1 comparisons.

2 Q. Okay. So you had it -- when you did the review,
3 you had your own computer that had ACES on it next to
4 the computer that you did the review on so you could
5 look from one to the other?

6 A. Yeah. I mean it's not the best process, but it's
7 serviceable if you really have to.

8 Q. Okay. You didn't see any source code statements
9 that were identical though; correct?

10 A. I don't know that I could say that one way or
11 another.

12 Again, my focus was on the architecture and the
13 analysis of how those pieces fit together.

14 Q. Okay.

15 A. There could always be lines that end up being
16 identical as a result of the fact that there are
17 programming constructs that will look the same when
18 you're doing any sort of development, but, you know, I
19 didn't go deeper into it from the particulars of
20 particular lines of code.

21 Again, this was an architectural analysis of the
22 parties' source code.

23 Q. What programming language or languages were -- was
24 ACES in the first eight bullet points on Attachment 2
25 written in?

CONFIDENTIAL

Page 47

1 A. I think it was C++, but I would have to
2 double-check if that's the only thing it's written in.

3 Q. Okay, and what about the review computer; what
4 language was the code written in there?

5 A. Primarily C-Sharp. I think there's also
6 JavaScript components if I recall.

7 Q. You say in paragraph 25 in the first line that
8 "Analysis of the parties' source code demonstrates that
9 core architectural design elements", okay, "used", you
10 go on.

11 Those are the items listed in paragraph 29, right,
12 the core architectural design elements?

13 A. For the TEG software for the Haptic Federal
14 software, that's in 27 through 28.

15 Q. Okay. So the first item that you're dealing with
16 in 26 "is the architectural concept of a board".

17 Do you see that?

18 A. I do.

19 Q. Okay, and then at the end of that paragraph, you
20 drop a footnote 10 there at the bottom, and then you
21 begin to cite to certain lines in the Haptic Federal
22 software; right?

23 A. I believe that's correct.

24 Q. Okay. Do you know who wrote the source code at
25 the lines cited in footnote 10?

CONFIDENTIAL

Page 48

1 A. I mean not as I sit here at this moment. I would
2 have to go and look at the repository.

3 Q. Okay, and then it's my understanding that if we go
4 forward to paragraph 29.1, that 29.1 is the same design
5 elements that you found in TEG's software; right?

6 A. You mean in the Haptic Federal software?

7 Q. Right.

8 So 26 describes what you saw in the Haptic Federal
9 software and then 29.1 is your description of what -- of
10 that same element that you found in the TEG software?

11 A. That's correct. I think you had reversed it when
12 you said it. So --

13 Q. Sorry.

14 A. No, no. I'm just making sure I was clear on the
15 question.

16 Q. Okay. So you drop a footnote to 29.1 to
17 footnote 18 and you go into some detail. It goes on to
18 the next page about different lines where you find that.

19 Do you know who it was who wrote the source code
20 that you're citing to in footnote 18?

21 A. So, again, I would have to check in the repository
22 history, but I want to just make clear, at this point,
23 when we're talking about the source code, you know, we
24 need to distinguish here between just the actual line of
25 text and the design, the sequence, the structure, the

CONFIDENTIAL

Page 49

1 organization of how this system operates that are being
2 implemented by those lines of text.

3 You know, you might be able to say look at the
4 repository and see who wrote down the actual here is the
5 text of this particular line in a particular commit, but
6 that is distinct from the question of the design
7 elements, the structure and sequence and organization
8 that's inherent in those lines. That is a different
9 point that's not quite the same.

10 Q. Okay. Is it your opinion that the design
11 elements, which you're saying are different from the
12 source code, that these design elements that you found
13 in paragraph 29, the three of them, that those design
14 elements were confidential information owned by TEG?

15 MR. DELANEY: Object to the form of the
16 question.

17 You can answer.

18 THE WITNESS: So, yeah, I mean I would say, to
19 start, I don't think I've offered any opinions one
20 way or another on confidentiality.

21 BY MR. ROTHMAN:

22 Q. Okay.

23 A. I can say that the design elements between the two
24 are the same and the design elements listed in 29.1
25 through 29.3 are all developed between, I think, 2017

CONFIDENTIAL

Page 50

1 and 2018.

2 I'd have to double-check the dates for the
3 earliest commits on some of those, but at least through
4 2018. Those are the most recent commits, I think, which
5 are cited in my report.

6 Q. Okay.

7 A. Those predate the designs that are implemented in
8 the Haptic Federal software.

9 Q. Okay, and in other words -- well, withdrawn.

10 Are you -- is it your testimony that TEG was the
11 first to use the concept of a board in the design of
12 software?

13 A. No. I think that's going further.

14 I'm talking about a board in the context of this
15 particular application and how the pieces of that puzzle
16 fit together.

17 Q. Okay. Are you -- is it your opinion that TEG was
18 the first to use the concept of a board in this type of
19 application; that is, no other software company had
20 previously used the concept of a board in this type of
21 software application?

22 A. No. Now you're going too narrow.

23 So, again, it's -- that is one component and it is
24 the core of this application as a part of the larger
25 system architecture.

CONFIDENTIAL

Page 51

1 It is the most important concept for someone to
2 understand when you're trying to figure out how these
3 components work, but it's part of this system as a whole
4 and that's what I'm looking at when I'm comparing these
5 two.

6 I'm not going -- you've gone both broader and more
7 narrow. That's not quite what I'm saying.

8 Q. Okay. Is it that the combination of the concept
9 of a board, the use of WebSockets and the use of chat
10 and video streaming functionality together is something
11 that TEG was the first to use; is that what you're
12 saying?

13 A. I don't think I have said that they are the first
14 to use it.

15 Q. Okay.

16 A. I said they developed a system using this
17 architecture.

18 I haven't gone further than that to say it was the
19 first time, but I think that this architecture was
20 developed by TEG for this application and its purpose,
21 and then my understanding, that is Mr. Mullican
22 testified that he then had meetings with Mr. Fischer and
23 discussed and provided that design architecture as the
24 parties started at the outset of their relationship, and
25 then what I can see in the Haptic Federal code is the

CONFIDENTIAL

Page 52

1 same architectural elements are present in the designs
2 that are inherent in TEG's source code.

3 Q. Okay. Great.

4 MR. ROTHMAN: Do you want to take a break now
5 or -- for five minutes --

6 THE WITNESS: That's fine.

7 MR. ROTHMAN: -- and then we can come back.

8 It's 20 after 11. I have some more to ask, but
9 just to offer it to you.

10 THE WITNESS: Sure. I'd love to get a bottle
11 of water actually.

12 MR. ROTHMAN: Okay. Great. Me too.

13 All right. Let's take five minutes.

14 Thanks.

15 (Thereupon, a recess was taken at 11:21 a.m.,
16 after which time the deposition resumed at
17 11:27 a.m.)

18 BY MR. ROTHMAN:

19 Q. Okay. So let's look at paragraph 27.

20 Paragraph 27, you talk about "implementing the
21 WebSockets communications protocol"; correct?

22 A. Correct.

23 Q. Okay. In your footnote 12, you refer to the
24 protocol "Comments 6455" from the Internet Engineering
25 Task Force. It's dated December 2011.

CONFIDENTIAL

Page 53

1 Do you see that?

2 A. I do.

3 Q. Okay. So you're not saying that it was TEG's idea
4 to use WebSockets as a design element for a computer
5 program initially or originally; correct?

6 A. Can you repeat that? I'm not quite sure that it's
7 right the way you phrased it.

8 Q. You're not saying that it was TEG the first to use
9 WebSockets as a design element for a computer program?

10 A. For any computer program ever?

11 Q. Right.

12 A. Correct. That's further than I'm going.

13 It's the choice of this particular technology for
14 this particular architecture is what we're talking about
15 here.

16 Q. Okay, and it's -- you're basing your opinion on
17 the fact that you saw the use of WebSockets in ACES, you
18 were told that ACES was created by TEG, and then you saw
19 the use of WebSockets in the haptic review computer;
20 correct?

21 A. I mean I --

22 MR. DELANEY: Object to the form.

23 THE WITNESS: I would say you have perhaps
24 oversimplified that.

25 It's not just the use of WebSockets, the use of

CONFIDENTIAL

Page 54

1 WebSockets as part of the architecture as a whole.
2 It's not just, oh, here's WebSockets in one. Here's
3 WebSockets in another.

4 It's how those components are connected to
5 implement the functionality of the two systems as a
6 whole.

7 BY MR. ROTHMAN:

8 Q. Okay. I only have three elements that you've
9 called out in paragraph 29, right; the board, WebSockets
10 and chat and streaming -- chat and video streaming. I
11 just have those three.

12 Are you saying that there are more design elements
13 that TEG contributed besides those?

14 A. I'm saying that while I have summarized those
15 elements to high levels, specific connections and the
16 specific implementations that build those up for these
17 purposes are part of that as well.

18 You can't just reduce it just to that level. It's
19 a little bit broader than that. In fact, that's some of
20 what I have cited in the footnotes where I'm pointing to
21 specific conscience to be able to say, this is where
22 some of that functionality is implemented that links
23 these things together.

24 Q. And do I understand correctly that there is no
25 design document anywhere that specifies the use of these

CONFIDENTIAL

Page 55

1 three design elements in how they're linked together as
2 you've described?

3 A. I would say I don't know that I have seen one
4 that's like a document that was written in advance of
5 programming. It's not necessarily atypical, especially
6 if you have a small team or individuals working on code.
7 They don't necessarily write down a design document, but
8 I mean I don't know that I have seen one so far, --

9 Q. Okay.

10 A. -- again, with the caveat of my earlier testimony
11 being except insofar that there's documentation in the
12 source code itself on README files and other materials
13 as well.

14 Q. Okay. The documentation in the source code that
15 you saw, the README files and the comments, did you see
16 any README files or comments where, when you read them,
17 it indicated to you that the three elements that you
18 call out in paragraph 29 made up some larger design
19 concept that TEG was going for, or did it just talk
20 about, in this piece of code, we use WebSockets, or in
21 this piece of code, we implement chat and video
22 streaming?

23 A. I would have to --

24 Q. Do you understand my question?

25 A. I understand your question. I just don't recall

CONFIDENTIAL

Page 56

1 as I sit here. I would have to go back and look at the
2 code to answer it specifically.

3 Q. Okay. So I'm trying to understand whether it's
4 your opinion that it's these three items in paragraph 29
5 used together that constitutes what TEG contributed or
6 whether TEG's contribution consists of three separate
7 features functionality from a design standpoint that are
8 disconnected from each other.

9 Do you understand my question?

10 A. No, I don't think I do.

11 Q. Okay. By combining these three items into
12 paragraph 29, you seem to be suggesting that these three
13 items are somehow connected.

14 In other words, the use of WebSockets with a board
15 and chat and video streaming is TEG's design concept.

16 Is that what you're saying?

17 A. I think in that they are sort of the core of the
18 architecture that was being implemented, I think that is
19 correct, --

20 Q. Okay.

21 A. -- and there's other parts of the system as well
22 obviously which, again, I'd have to refer back to the
23 source code for, but I think in general terms, that's
24 correct.

25 Q. Okay, but you never saw anywhere where it said you

CONFIDENTIAL

Page 57

1 have to use WebSockets and a board and chat and video
2 streaming functionality together; you never saw anything
3 like that?

4 A. I mean except for the source code itself perhaps,
5 which is where those designs are implemented.

6 Q. Right.

7 A. I mean it's in the pudding on something like that.
8 That's what they ultimately built, --

9 Q. Okay.

10 A. -- just source code.

11 Q. Got it.

12 So beginning in paragraph 32, you go through
13 testing.

14 What is it that you're saying that TEG contributed
15 in terms of testing?

16 A. So refer you to, for example, 33 and 34.

17 In 33, I say, "Evidence in the record demonstrates
18 that TEG performed system testing on the Haptic Federal
19 software", and in 34, I refer to "regression testing",
20 which is a form of testing that is similar to system
21 testing, but it's for the specific purpose of
22 demonstrating that defects that may have already been
23 resolved have not recurred after functionality that has
24 been changed and being further modified or extended,
25 basically making sure that if you change something to

CONFIDENTIAL

Page 58

1 fix a problem, when you make further changes, you didn't
2 break it again.

3 Q. Okay.

4 A. Let me -- if I may, let me just finish reading --

5 Q. Sure.

6 A. -- to make sure there's nothing further I wanted
7 to add to that.

8 Yeah, I mean I guess, in general, this whole
9 section involves sort of the testing after its -- we can
10 go through in more detail.

11 There's evidence that I point out in 36 that there
12 is testing going on and defects that are being
13 remediated and identified by the parties jointly.

14 I've identified various defects that appear to
15 have been identified by TEG personnel in 38. That's
16 also covered in Attachment 3 to my report, you know, and
17 obviously I talk about some changes that seem to have
18 been implemented in the source code, you know, looking
19 through the materials in terms of the records that were
20 identified by TEG as a problem that ultimately were then
21 changed by Max sort of at the direction of TEG to
22 resolve the issue.

23 Q. Okay. So TEG was not making changes to the source
24 code as a result of testing; it was all done by someone
25 at Max?

CONFIDENTIAL

Page 59

1 A. I would have to look at -- in general, that might
2 be right.

3 There may be things like system configurations or
4 other things that would have been changed by TEG on the
5 corey (phonetic) version of the source code, for
6 example, that they might have identified and fixed.

7 I would have to go back and look and see if
8 there's anything indicative of that particularly, but
9 that is one possibility when you're doing this kind of
10 system testing in software.

11 Q. Okay. One possibility but not something that you
12 observed?

13 A. I'm not sure if there was anything that was
14 referenced in some of the conference call videos I saw.
15 So I'd have to go back and check through some of those
16 again.

17 I know they did talk about some things that they
18 were changing, configurations and other materials, but I
19 don't know that I could give an affirmative answer one
20 way or another or not without checking those materials
21 again.

22 Q. Okay. So did you see in the course of your review
23 any sort of test design documents or specifications?

24 A. I seem to recall there were -- there's references
25 in the record to testing and test plans, but I would

CONFIDENTIAL

Page 60

1 have to go back and check the materials that I saw those
2 in to refresh my recollection.

3 Q. Okay. Did you see any test documents that were
4 written by TEG; other words, a test specification that
5 TEG -- someone at TEG wrote?

6 A. I don't -- nothing like that comes readily to
7 mind.

8 I know there were four to five reports, I believe
9 I've seen, that included programatically detected
10 security vulnerabilities and things like that.

11 In terms of like a plan for how testing is to be
12 done, I don't know that I've seen something like that,
13 although that again is like -- just like with the
14 software design documents, you know, your mileage will
15 vary on the extent to which parties actually create
16 those upfront. Some do. Some don't.

17 Q. You talk about regression testing in paragraph 34.

18 There's a definition of regression testing in
19 3.3371.

20 A. You're talking of the ISO standard?

21 Q. Yeah.

22 A. Uh-huh.

23 Q. When you talk about regression testing, are you
24 saying that TEG did regression testing?

25 A. So for that, I mean that's my understanding of

CONFIDENTIAL

Page 61

1 what we're talking about here in, for example, the
2 April 25th, 2023, conference call that's listed in -- or
3 I should say that's transcribed in paragraph 33 where
4 Mr. Herren and Mr. Sinnk talk about running regression
5 parallel together, or I should rephrase, where it
6 says -- where Mr. Herren says, "We can run through
7 regression testing, right? In parallel."

8 Q. Okay. You say in the last sentence of paragraph
9 34, "Regression testing is typically a technical test
10 carried out by the software's developer"; right?

11 A. I do.

12 Q. Are you saying that it cannot be done by the
13 software user or the software distributor?

14 A. Typically, no. Typically when you're doing
15 regression testing, it's part of the development cycle
16 where you're working on developing software for a
17 particular purpose.

18 So, you know, there are various kinds of technical
19 tests that will be done as part of the software's
20 development in order to ensure that it works right.

21 Regression -- and those are all very technical in
22 nature. You know, that's not something a user would
23 typically do.

24 Regression testing is one of those tests. That's
25 the sort of thing a developer would do as part of its

CONFIDENTIAL

Page 62

1 system testing to make sure fun -- a particular area of
2 functionality is stable.

3 Q. Well, but the -- one of -- several of the
4 definitions for "regression testing" in Exhibit 2, for
5 example, definition 2, "testing required to determine
6 that a change to a system component has not adversely
7 affected functionality, reliability or performance and
8 has not introduced additional defects", do you see that?

9 A. I do.

10 Q. It seems like something that a user could do;
11 right?

12 A. I mean as a like could somebody go and press a
13 button to regression test, theoretically, that is
14 possible. In practice, that's not what is done.

15 Q. Well, but your transcript here, assuming that
16 there were changes made to the software by Max, to the
17 source code by Max, okay, are you with me?

18 A. Uh-huh.

19 Q. And then there was a need to make sure that those
20 changes have not adversely affected functionality,
21 reliability or performance and didn't introduce
22 additional defects, then how is what's described in
23 paragraph 33 inconsistent with that?

24 A. Because a user is not typically the party in a
25 software development project who's executing those

CONFIDENTIAL

Page 63

1 technical tasks.

2 In a typical software development project, the
3 vendor, the manufacturer of the software, is the one
4 who's going to do all of the initial work to make sure
5 that the quality issues have been addressed before
6 providing it to the customer.

7 That's not what we're talking about here.

8 What we're talking about here says running through
9 regression testing in parallel, together.

10 Q. Is it your assumption that TEG is the customer?

11 A. No.

12 Q. 'Cause that's what you said.

13 MR. DELANEY: Objection; mischaracterizes the
14 testimony.

15 BY MR. ROTHMAN:

16 Q. What I understood you to say is that what's
17 described in paragraph 33 is not something that a
18 customer would do, and that indicates to me that from
19 your point of view, TEG is a customer for this software.

20 A. No.

21 Q. Am I wrong?

22 A. I think you've misunderstood my testimony.

23 Q. Okay. So if TEG -- you do not think TEG was a
24 customer for the software?

25 A. No. I would say, based on what I've seen in the

CONFIDENTIAL

Page 64

1 record, they were jointly developing and creating and
2 testing the software.

3 In this particular paragraph, we're talking about
4 testing now.

5 Q. Okay, and when you say "jointly developing", the
6 word development, okay, what is your definition of
7 development or if -- or better, what is your definition
8 of joint development?

9 A. So I would say, in a joint development project,
10 parties typically share responsibilities for creating a
11 software product for whoever their customers ultimately
12 would be.

13 That's going to include shared technical tasks
14 typically, things like design, code construction,
15 testing, implementation, sort of the key phases of the
16 software development lifecycle, and I've set that all
17 out in section, I think it's VII A of my report.

18 Those are the kinds of typical activities where,
19 when a vendor is doing a project, they're going to be
20 executing these very technical steps of this process.

21 When the parties are collaborating on those steps,
22 that's indication that joint development is going on.

23 Q. Okay, but the definition of -- your definition of
24 development, it sounds like, includes more activity than
25 just the authoring of source code.

CONFIDENTIAL

Page 65

1 A. Correct.

2 I mean it's the same way in building a house.

3 Building a house isn't just putting up girders and
4 hanging drywall.

5 There's steps that have to be done when you say to
6 someone, I want you to build me a house; designing it,
7 making sure it's safe to live in through testing it, as
8 well as putting up those steps, and that's my point
9 here.

10 Software development is the same way. It's not
11 just I write source code on a page. You have to design
12 what you're going to write. You have to write it. You
13 have to test it. You have to make sure it's actually
14 going to work.

15 Those are all typical and necessary steps of what
16 is called the software development lifecycle or a
17 software development lifecycle.

18 There's obviously different ways you can implement
19 those processes and all of that's covered in section A
20 of my report.

21 Q. Take a look at the definition of source code in
22 Exhibit 2 at 3.3882.

23 A. I'm sorry. 3 --

24 Q. .882.

25 A. Okay.

CONFIDENTIAL

Page 66

1 Q. It says, "computer instructions and data
2 definitions expressed in a form suitable for input to an
3 assembler, compiler, or other translator."

4 Do you see that?

5 A. I do.

6 Q. Okay. With respect to the software that you
7 reviewed on the review computer, did you find any source
8 code, using that definition, authored by TEG?

9 A. Well, so, again, as I pointed out earlier, there
10 is a distinction between individual lines of text and
11 the designs being implemented by those lines of text.

12 You can't just say, you know, oh, they -- this
13 person wrote the pen to the paper.

14 If they're using designs jointly created or
15 created by another party, that's where we get into the
16 distinction of what's going on and the facts specific to
17 this case.

18 Q. I understand that distinction.

19 The question was a simple yes or no.

20 MR. ROTHMAN: Can you read back the question,
21 Madam Reporter?

22 THE COURT REPORTER: Just a second, please.

23 (Thereupon, the question referred to was read back
24 by the court reporter as above recorded.)

25 THE WITNESS: Yeah. I mean I think my answer

CONFIDENTIAL

Page 67

1 is ultimately the same.

2 I think inclusive in the way that question is
3 asked is a conclusion that if somebody wrote this
4 line of code, therefore, it is authored by that
5 person.

6 It is more complicated than that because there
7 are the other steps of the software development
8 process that lead to the conclusion of how those
9 lines of code are being chosen to be read.

10 That is where you get into the specific facts
11 that we're looking at in this case with the
12 similarities in the design that I've pointed out.

13 BY MR. ROTHMAN:

14 Q. Okay. The designs are similar; right?

15 A. Correct.

16 Q. Okay. Is the source code for the software you
17 reviewed on the review computer source code that was
18 written as in the definition of source code, "expressed
19 in a form suitable for input to an assembler, compiler
20 or other translator", written by anyone at TEG?

21 A. Well, again, I think I've answered that as well.

22 I think I have seen references in the record where
23 there's testimony that things like pseudo code and
24 whatnot were provided at various points to Max in the
25 development of the Haptic Federal software.

CONFIDENTIAL

Page 68

1 I haven't gone further to try and look for those
2 given the restraints of the review computer at this
3 time.

4 It doesn't mean that they're not there or there
5 might be substantial similarities to things that are
6 there.

7 That's something I would have to check further
8 for. So I don't know that I can answer that at this
9 moment without doing further review.

10 Q. Okay. Turning to your item capital C beginning on
11 page 18 at paragraph 42, --

12 A. All right. Give me one moment to scroll.

13 Okay.

14 Q. -- can you just summarize what your opinion is in
15 this section?

16 A. Sure.

17 So I understand that there are -- one of the
18 things at issue is the source code having been made
19 publicly available by -- that -- I should rephrase.

20 I understand one thing at issue is that TEG made
21 source code available for Haptic Federal software at
22 some point in time. You know, I forget the exact time
23 frame, 2021, 2022, '23, probably '23, '24, I forget the
24 exact date.

25 You know, as that may pertain to potentially

CONFIDENTIAL

Page 69

1 issues of confidentiality, which I understand trade
2 secrets are one thing that's at issue in this case, you
3 know, what I'm pointing out in this opinion is that the
4 functionality of the source code that composes the front
5 end of the Haptic Federal software, you know, was being
6 made available, or a portion thereof that are consistent
7 with what's in the Alleo software were being made
8 available publicly in the form of what is called a
9 minified JavaScript file, and I get into detail in my
10 report obviously about minification and how minification
11 is fundamentally a technique that does not obfuscate the
12 source code in a manner that changes its functionality
13 and how it can be what is called beautified to create
14 that -- to create something that is easier to read and
15 that will show the functionality in less compacted terms
16 in a minified file, and that's sort of everything that's
17 covered in section C in terms of how that code is being
18 made available, what is actually listed in terms of, you
19 know, the time period I found and all of that sort of
20 detail.

21 Q. I understood you to be saying basically that what
22 TEG did with respect to the allegations of making the
23 source code maps available was the same thing as what
24 Max does with respect to making minified JavaScript
25 available online.

CONFIDENTIAL

Page 70

1 A. That's not quite what I said.

2 Q. Okay. So is what TEG did, which is making source
3 code maps available online, the same as making minified
4 JavaScript available online?

5 A. I would say there's overlap.

6 Both approaches make the functionality of the
7 software publicly available, or at least I guess in the
8 context of this, where the code can be directly
9 accessed, but when you have a JavaScript-based front
10 end, the JavaScript files composing the front end have
11 to be downloaded to the client's computer that's running
12 it. It's just a feature of how that's worked. They are
13 interpreted by the client's side of the computer in
14 order to render the front end.

15 So in order for those files to work, the logic
16 that implements the actual functionality of the front
17 end is included in what's downloaded.

18 If those servers are publicly available, anyone
19 who downloads those files will have the underlying
20 functionality in the file they're downloading. That's
21 the point I'm trying to make.

22 Q. Okay. JavaScript has to be downloaded if you need
23 JavaScript in order to utilize the functionality, and so
24 you are -- by choosing to use JavaScript, you're going
25 to make some information available to the end user;

CONFIDENTIAL

Page 71

1 correct?

2 A. To the end user, that is correct.

3 Q. Okay. Is that the same as in terms of the
4 functionality and information you make available to the
5 end user when you make source code maps available?

6 A. In terms of functionality, it is. Ultimately, the
7 functionality is still the same.

8 Q. Okay, but in terms of other concerns such as
9 information security or confidentiality?

10 A. What about -- I'm sorry. Could you clarify the
11 question?

12 Q. Yeah.

13 Is it the same in your view, in terms of
14 confidentiality or information security concerns, making
15 minified JavaScript available versus making source code
16 maps available?

17 A. Sure, absolutely.

18 Q. Okay. So the implication -- withdrawn.

19 (Thereupon, the below-referred to document
20 was premarked as Plaintiff's Exhibit Number 6 for
21 Identification.)

22 BY MR. ROTHMAN:

23 Q. Did you review the Exhibit Number 6, the
24 Declaration of Robert Simon and the memo that's attached
25 to it, at any point before rendering your opinion?

CONFIDENTIAL

Page 72

1 A. Yes, I did.

2 Q. Okay. So did you ever attempt to go through the
3 exercise that Mr. Simon goes through in the memo
4 attached to his declaration?

5 A. Let me just take a look through the memo.

6 I mean certainly in terms of downloading all of
7 the website resources, I think I point out in my report
8 that the approach I used to download the minified files
9 is just to document that these things are available,
10 used this "Save All Resources" Chrome plug-in that he
11 used as well.

12 Q. Okay, but my question was, did you go through this
13 exercise that he sets forth in his memo; did you
14 actually do this?

15 A. Well, my point is there are multiple exercises in
16 his memo.

17 Q. I know.

18 Again, my question is, did you do what -- step by
19 step what Mr. Simon documents in his memo?

20 A. I mean are you talking about every piece of this
21 memo; is that what you're asking?

22 Q. So in other words, beginning on the memo, if
23 you're looking at page 4 of the memo, it says, "Below
24 please find step-by-step directions for how to find,
25 review, and capture the Max Minds applications and

CONFIDENTIAL

Page 73

1 associated source code as being served publicly on the
2 internet by TEG", and then there are steps under to
3 identify source code map files and then to view source
4 code.

5 Do you see that?

6 A. I do.

7 Q. Okay. Did you follow these steps in an effort to
8 recreate what Mr. Simon lays out here?

9 A. I don't remember if I did this for TEG or if I did
10 this at one point for Max Minds. I do seem to recall
11 investigating this issue, but this was right at the
12 outset of work on this matter. I don't recall the
13 specifics of which set of code I did this on.

14 Q. So you did follow these directions?

15 A. I mean I seem to recall certainly reviewing this
16 and looking into it. I just -- I don't recall the
17 specifics as I sit here right now.

18 Q. If you did do it, did you keep notes or records of
19 what you did?

20 A. I don't think so. I think when we were testing
21 this out, we were sort of on a time constraint of some
22 sort.

23 I don't recall saving anything from just sort of
24 initial investigation right at the outset of the work in
25 this.

CONFIDENTIAL

Page 74

1 Q. Were you at all involved in the process of
2 recommending or advising TEG what to do about the issue
3 that's raised in Mr. Simon's declaration?

4 A. That's all discussions with counsel potentially?

5 Q. Yeah, it would, absolutely.

6 MR. DELANEY: Well, if it involves discussions
7 of counsel about advice on how to handle an action
8 rather than opposed to an expert opinion, we may
9 have to claim privilege on that.

10 So --

11 MR. ROTHMAN: Okay.

12 MR. DELANEY: -- I would instruct him not to
13 answer, just to the extent --

14 MR. ROTHMAN: So --

15 MR. DELANEY: -- that he knows.

16 MR. ROTHMAN: So you're -- okay. So you're
17 invoking work product privilege as to any advice he
18 may have given to TEG through counsel?

19 MR. DELANEY: If that's what you seem to be
20 asking about and he has identified that as an issue
21 in which he has -- which would involve him providing
22 advice, and sitting here right now, I don't know the
23 parameters of that, but based upon your question and
24 his reaction, I think we'll have to assert privilege
25 and work product doctrine at this point for that

CONFIDENTIAL

Page 75

1 line of inquiry.

2 MR. ROTHMAN: Okay.

3 (Thereupon, the below-referred to document
4 was premarked as Plaintiff's Exhibit Number 15 for
5 Identification.)

6 BY MR. ROTHMAN:

7 Q. So with respect to the source code map issue, take
8 a look at Exhibit 15.

9 I just want to ask you a few questions about
10 Exhibit 15.

11 A. Okay.

12 Q. Have you seen in the course of your review -- I
13 didn't see these.

14 These are a collection of "Azure DevOps" messages
15 for the Azure source code management system?

16 I didn't see these listed in your items reviewed
17 in Attachment 2.

18 A. I'm sorry. What was the question there?

19 Q. The question is, did you see any documents that
20 look like what's in Exhibit 15 in the course of your
21 review?

22 A. I would say I've seen them because they were, I
23 think, attached to the most recent motions. I don't
24 know -- I don't recall seeing them prior to that, but
25 I'd have to check my records.

CONFIDENTIAL

Page 76

1 Q. Okay. Well, I don't know that they were, but
2 anyway, looking at the first page, do you know anything
3 about the first page where it says, "Add licensing info
4 to codebases"; do you have any knowledge of what was
5 being done here?

6 A. Not without additional context.

7 Q. Okay. In the course of your review, did you --
8 were you asked to look at anything concerning licensing
9 issues with the software?

10 A. Sure.

11 Q. Okay, and what did you find?

12 A. So I think that is covered. I'll just point it to
13 you in my report.

14 I think this is covered in general in paragraph
15 40.

16 There is documents in the record that I reviewed,
17 for example, what's cited at footnote 29, regarding
18 licensing issues that the parties were trying to address
19 during their development, you know, and the fact that
20 there was a license expired banner in software that was
21 being displayed on the Haptic Federal software that was
22 causing a problem for the government customers who were
23 trying to use the software, and I know I've seen e-mails
24 such as the one that's cited there from around this time
25 period that get into that issue, and ultimately, that

CONFIDENTIAL

Page 77

1 was something Max removed in the source code in 2023 as
2 pointed out at the end of paragraph 40 and cited in
3 footnote 30.

4 Q. Right, but the time frame that you're talking
5 about in paragraph 40 is different from this message,
6 which is from 5/9/2024.

7 Do you know anything about licensing issues around
8 May 9th, 2024?

9 A. That doesn't ring any bells as I'm sitting here.
10 I don't know that I've included anything of that for the
11 opinions I've offered for this report.

12 Q. All right. You know that there's an allegation in
13 this case about TEG removing the licensing logic in
14 Max's software; right?

15 A. I think that's consistent with what I've seen in
16 various documents.

17 Q. Okay. Did you see any -- where in looking at the
18 code, did you see any indication that TEG removed
19 licensing logic in the software --

20 A. I don't think I've offered --

21 Q. -- and then changed it?

22 A. I don't think I've offered any opinions on that in
23 the analysis, just what's in the report.

24 Q. Okay, but did you see it?

25 A. I mean as I pointed out, I think, in my report,

CONFIDENTIAL

Page 78

1 and I'll show you or I'll point you to the exact
2 section --

3 Q. No. I -- is it the one we were just talking
4 about?

5 A. No.

6 One moment. I'll give you the specifics.

7 As I pointed out, the comparison I did was between
8 TEG's earlier software from 2017/2018 --

9 Q. Oh, okay.

10 A. -- to Max's software from -- well, and I'm sorry,
11 I shouldn't say Max's, I should say the software that
12 was produced by Max, on the review computers in mid 2019
13 and fall of 2023.

14 Q. Okay. Take a look at the fourth page of this
15 exhibit, please. It's --

16 A. I'm sorry. Of which exhibit?

17 Q. The one we were talking about, 15.

18 A. Okay.

19 Q. 5/10/2024, the "Subject: User Story 233 - Strip
20 Code on build from front-end".

21 A. Okay.

22 Q. So have you seen this before?

23 A. And, I'm sorry, this referring specifically to?

24 Q. This document.

25 A. I mean, again, I think I've seen it in preparing

CONFIDENTIAL

Page 79

1 for deposition in review of the materials provided to me
2 by --

3 Q. Take a look for a second at the description at the
4 bottom of that page.

5 A. Okay.

6 Q. Do you understand this description here on this
7 document, what it's talking about?

8 MR. DELANEY: Objection.

9 You can answer if you can.

10 THE WITNESS: I mean they're talking about
11 creating a script, but that typically refers to
12 creating source code.

13 You know, I really only have what's here for
14 context. I don't have all their information. I
15 don't even know if this is the full work item.

16 There's obviously a link in this e-mail that
17 says "View work item".

18 So I'm not sure if there's more information
19 beyond what's here and on the next page, but I mean
20 I only really can tell you what it says in this
21 Description section.

22 BY MR. ROTHMAN:

23 Q. Right.

24 My question is, from reading this Description
25 section, does it -- is it your view that what's being

CONFIDENTIAL

Page 80

1 described here, to remove or strip code from the source
2 maps, to remove source from the source's content keys,
3 from the map files, is that in your view the same as the
4 issue that you raised with use of minified JavaScript;
5 in other words, that minified JavaScript being shown on
6 the front end would create the same security concerns
7 that the source map files being on front end create?

8 A. I'm not entirely sure I understand the question.

9 I would say that at the end of the day, the
10 functionality that's in the source map is the same as
11 what's being included in minified JavaScript files.

12 Q. The functionality is the same; did I understand
13 that correctly?

14 A. Correct.

15 Q. The functionality that's shown in the source code
16 map is the same as the minified JavaScript; correct?

17 A. I'd have to look at the source map files.

18 Certainly the application is going to have to
19 have -- whatever JavaScript's functionality is present
20 in those files in some manner is going to have to be
21 transferred to the client computer in order to run.

22 Q. You wouldn't need to transfer the source code map
23 or the source code files to the client computer, would
24 you?

25 A. I'd have to look at the front end of the code to

CONFIDENTIAL

Page 81

1 answer that.

2 Q. Okay. Is your opinion in your report an opinion
3 about whether exposing source code map files creates a
4 security issue or a confidentiality issue, is that your
5 opinion, or is it just about the minified JavaScript?

6 A. Let me just refer back to my report to make sure
7 it is accurately stated.

8 I would say that -- let me just take a look to be
9 specific.

10 I would say my opinion is specific really to the
11 minification --

12 Q. Okay.

13 A. -- and to its use of the -- potential uses of
14 technique to the extent that might be claimed with
15 respect to confidential information.

16 That's what's in 45 and 46, and as I point out in
17 footnotes, for example, in footnote 34, the use of the
18 security through obscurity type approach where it's just
19 not clear what you're looking at is not enough and is
20 recognized in the industry as not enough to protect
21 confidential information. More stringent measures are
22 typically required.

23 Q. Okay. It's not your opinion, I want to make sure,
24 you're not rendering an opinion about whether exposing
25 minified JavaScript and exposing source code map

CONFIDENTIAL

Page 82

1 information, that those two things both expose the same
2 file types, the same file names or the same directory
3 structures, is it?

4 A. I don't know that I've gone that far.

5 I think the point I've raised here is simply the
6 functionality with that. I think that is what I have
7 said although I'd have to check for the citation on
8 that.

9 Q. Okay. Going back to you mentioned pseudo code
10 earlier.

11 If you look at Exhibit 2, at 3.3228 --

12 A. I'm sorry. Give me that one more time, the
13 number.

14 Q. 3.3228.

15 A. Okay.

16 Q. Okay. Is the definition there consistent with how
17 you use the term pseudo code in your report or in your
18 testimony?

19 A. Let me just review it to be sure.

20 Yeah, I think that's general enough to adequately
21 summarize my understanding of how that term is typically
22 used.

23 Q. Okay, and there's an example given after the
24 definition that says, "IF the data arrives faster than
25 expected, THEN reject every third input ELSE process all

CONFIDENTIAL

Page 83

1 data received ENDIF."

2 Do you see that?

3 A. I do, and just for clarity in the record, the
4 words "IF", "THEN", "ELSE" and "ENDIF" are all in all
5 caps.

6 Q. So when you're talking about pseudo code, you're
7 talking about somebody at TEG giving a statement like
8 that in the example to Max?

9 A. So it could be like that. That is one example.

10 Q. Okay.

11 A. This is more consistent with definitions 2 and 3
12 in this --

13 Q. Okay.

14 A. -- particular verbiage, but let me finish my
15 response.

16 Q. Sorry.

17 A. In the first definition, the pseudo code can be
18 and in many cases is more programming language specific.

19 It might not be totally grammatically correct in
20 the context of the particular programming language, but
21 it might be written in something that's much closer
22 than, you know, "IF ELSE" with written description in
23 English of what should be going on.

24 That would be sort of a -- you know, the example
25 that's listed here is more sort of a high level

CONFIDENTIAL

Page 84

1 structural element of a particular algorithm that you
2 might have, but you can have pseudo code that is more
3 detailed even if it's not specific. It depends on the
4 nature of pseudo code. By its very nature, it's pretty
5 general as to how you can use that term.

6 Q. Okay. In any event though, it would be necessary
7 for someone who was using the pseudo code to take the
8 point being made in the pseudo code and turn it into
9 source code in the correct language in the application
10 for it to work; it couldn't just be copied and pasted
11 into the code?

12 A. Not literally, but you could still use the sort of
13 design of that particular function and that could be the
14 thing that's in the message, and it could be that there
15 might be specific lines that could be verbatim the same
16 with the missing bit being whatever hasn't been
17 developed that you're saying in pseudo code, well, this
18 is what would have to be further fleshed out.

19 It varies based on the pseudo code you're using.
20 You can do it at any level of generality.

21 Q. Do you know the difference between JavaScript and
22 TypeScript?

23 A. I would say so.

24 Q. Okay. What's the difference?

25 A. So JavaScript is typically less structured in

CONFIDENTIAL

Page 85

1 terms of the variable definitions and the particular
2 types of variable using.

3 TypeScript provides sort of a more stringent set
4 of definitions than you're using when you're working
5 with JavaScript code.

6 So, for example, in JavaScript, you can create a
7 variable just saying it's a variable and the specific
8 type could vary based on the data that's stored inside
9 that.

10 TypeScript, if I recall correctly, refines that to
11 say you have to be more specific as to what type of data
12 is in that variable so that somebody using the program
13 can look at it and say, okay, this is an integer or a
14 string or some other particular type of data.

15 Q. Okay. Do you know what an angular template is?

16 A. Sure. I think so.

17 Q. Go ahead. Tell me what you -- what it is.

18 A. So angular is a JavaScript framework for creating
19 front end applications.

20 A template in this context is typically a set of
21 screen display elements that are going to provide some
22 redefined structure.

23 In this context, I would say an angular template
24 is a -- I don't -- I hate to make this sort of circular,
25 but it's a template for a JavaScript front end that is

CONFIDENTIAL

Page 86

1 built using the angular frame.

2 Q. Okay. If we go back to the issue of the exposure
3 of the source code maps, you said TypeScript is going to
4 be more specific than JavaScript; right?

5 A. I think that's correct, yes.

6 Q. Okay. So if the information in TypeScript files
7 was specific in a way that would create security
8 concerns for the exposure of those TypeScript files, you
9 with me so far?

10 A. I'm not sure I am, but why don't you finish the
11 question and then I'll ask for clarification.

12 Q. Okay. Would -- in your view, would the security
13 concerns be the same for the exposure of JavaScript
14 files?

15 A. I think the answer, if I understand your
16 question -- let me make sure I understand the question.

17 Is the question, when I'm providing minified
18 JavaScript, are the security concerns the same as if I'm
19 providing minified TypeScript?

20 Q. Not minified TypeScript but actually exposing the
21 TypeScript files themselves, the TypeScript files which
22 are used using the angular templates to create the
23 JavaScript.

24 A. I think the answer is yes in that the
25 functionality still has to be expressed one way or the

CONFIDENTIAL

Page 87

1 other.

2 You're getting functionality in both that's going
3 to describe the operation of the software, which could
4 potentially be investigated and attacked like from a
5 security perspective. That's what we're talking about
6 here.

7 There is functionality is what you're going to
8 have that's ultimately going to be the primary attack
9 factor.

10 You're going to say, how does this thing work so
11 that somebody could then say, well, where do I pull it
12 apart to make it work the way I want it to, to
13 compromise whatever that would be.

14 I think the answer is yes because the
15 functionality is the thing that's ultimately going to
16 matter.

17 Q. So in both cases, you're saying cases exposing
18 minified JavaScript versus the case of exposing the
19 original TypeScript files, the security concerns as to
20 functionality are identical in your view?

21 A. I think in that the functionality is being
22 exposed, yeah, that's what somebody's going to have to
23 look at. They're going to have to look at this code and
24 say, how does it work, in order to try and determine if
25 there is an attack factor.

CONFIDENTIAL

Page 88

1 Q. Okay. So a web browser, which is going to be what
2 is used to view or run the code, can a web browser
3 natively process original TypeScript files or angular
4 templates?

5 A. I'd have to look into that. Offhand, I'm not
6 totally sure. That gets into a TypeScript building
7 question that I'd have to go and check.

8 Q. Okay. Let's assume for a second that a web
9 browser cannot process and run TypeScript files or
10 angular templates just for the sake of argument.

11 So it couldn't use the original TypeScript or
12 angular templates to render a web page or create an
13 application. Okay. Let's assume that for the purposes
14 of this.

15 A. Okay.

16 Q. All right.

17 Would it then still be your view that exposing
18 minified JavaScript is the same in terms of security
19 concerns as exposing the original TypeScript or angular
20 templates?

21 A. I mean if ultimately you're going to use the
22 angular or TypeScript templates -- excuse me -- the
23 TypeScript or the angular templates in order to generate
24 JavaScript code, either way, what you're going to need
25 to have in some form is JavaScript that can be run

CONFIDENTIAL

Page 89

1 natively on a web browser.

2 That's ultimately what's going to be publicly
3 available to somebody who's going to need -- if they're
4 going to try and attack the code, that's what they're
5 going to have -- work -- ultimately, if you're upstream
6 of that and then somebody can generate the code from
7 that versus having the JavaScript code, you still have
8 the same problem.

9 If functionality is being exposed, you're creating
10 a potential attack.

11 Q. So I understand that statement as being indication
12 that you could take a minified JavaScript file and
13 reverse engineer or de-compile it to get back into the
14 underlying logic that was in the TypeScript or in the
15 angular templates.

16 Do I -- did I understand that correctly?

17 A. No. I don't -- the way you phrased that, I don't
18 think that's quite correct.

19 Q. Okay. So the TypeScript files, they have things
20 that are not in the minified JavaScript, right, like
21 they have metadata, annotations, comments and other
22 logic that a developer could read that doesn't exist in
23 minified JavaScript; right?

24 A. I think as you phrase that, the answer is still I
25 don't think that's right.

CONFIDENTIAL

Page 90

1 Q. No?

2 You think that the TypeScript file wouldn't
3 contain things that would also not be contained in
4 JavaScript or vice versa?

5 A. No. I mean I -- that's not what I said.

6 I think the way you phrased the previous question,
7 I think there was a problem with how you phrased it that
8 made it incorrect.

9 Q. Okay. Well, but my point is, the TypeScript
10 files, they're going to have information in it that
11 wouldn't end up in the minified JavaScript files;
12 correct?

13 A. That is possible, but it's not a -- you said
14 "going to". I don't think that's strictly speaking
15 right.

16 Q. Assuming there was information in the TypeScript
17 files in the nature of metadata, annotations, comments,
18 things like that, assuming there was that stuff in
19 there, right, that would not necessarily end up in the
20 minified JavaScript; right?

21 A. That I believe I agree with --

22 Q. Okay.

23 A. -- to an extent.

24 I mean I will clarify at least to say that I would
25 have to check and make sure there are no elements of

CONFIDENTIAL

Page 91

1 what you just said that would be structurally required
2 elements to the JavaScript program that would need to be
3 present as part of the translated minified code.

4 Q. Okay, but if my statement is correct then and if
5 those additional things, the metadata, the annotations,
6 the comments, if those things were of a confidential
7 nature, then it would be different to expose the
8 TypeScript files than it would be to just expose
9 minified JavaScript?

10 A. I -- confidential, I mean I guess I'm lacking some
11 context in terms of how you sort of set up the
12 hypothetical here.

13 Q. Understood.

14 The context would have been, I think, in the files
15 that were exposed that are -- that was discussed in
16 Mr. Simon's declaration and the attachment, but I can't
17 ask you about those 'cause counsel has raised a
18 privilege objection.

19 MR. ROTHMAN: So I have no further questions.

20 MR. DELANEY: All right. I just want to
21 clarify the record on one thing.

22 CROSS-EXAMINATION

23 BY MR. DELANEY:

24 Q. Thank you, Mr. Ferrara, for your testimony.

25 You had discussed at several points that there

CONFIDENTIAL

Page 92

1 were constraints on your review of the source code and I
2 don't know if you and Mr. Rothman ever stated what those
3 were.

4 So my question to you would be, what were the
5 constraints imposed upon your review of the Haptic
6 Federal source code as we're calling it?

7 A. So I would say there are two primary constraints.

8 First, not all of the source code that I -- based
9 on documents provided by Mr. Simon necessarily may
10 compose the Haptic Federal source code have been
11 produced.

12 There are a number of repositories that were
13 identified in one of his exhibits, one of his
14 declarations, that list something like, I think it's 91
15 source code repositories.

16 There is -- there are a number of repositories on
17 that list that reference haptic in some form or another.

18 Of that list, only four repositories have been
19 produced.

20 Again, these are the ones listed in Attachment 2
21 to my report.

22 I obviously don't know what I don't know about
23 those particular repositories, which, you know, I know
24 we have requested information about even just basic
25 metadata such as get logs that would provide some

CONFIDENTIAL

Page 93

1 clarity into what is in those repositories, and that is
2 one of the two constraints.

3 The other constraint is that the code is produced
4 in a review computer in the first place that's isolated
5 from any other code produced and is effectively air
6 gapped, for lack of a better term, meaning you can't
7 connect it to any other systems, you can't put anything
8 else on there.

9 Now, obviously we've prearranged for necessary
10 tools to be put on there, but, you know, when you're
11 working on a case where you need to compare source code
12 in particular ways, the typical approach would be to
13 have both sets of source code on a computer that could
14 be then reviewed so that you can do side by side
15 comparisons so that you can search for line by line
16 similarities.

17 That's not possible because this thing is on an
18 air gap computer system; so those both constraints on my
19 analysis in terms of what I could do.

20 I think also one other thing, thinking about it,
21 that I pointed out in one of my declarations, if I had
22 running -- I'm sorry -- if I had the repositories in the
23 system that I could potentially control that was not air
24 gapped, I could have stood up the software.

25 We could have actually done things like functional

CONFIDENTIAL

Page 94

1 testing to show specific elements of how the code are
2 used, what conditions they're used in, things like that.

3 That's not really possible in an air gap system.
4 It's not practical to be able to stand up a development
5 environment that typically would be connected to the
6 internet to be able to then build source code that's
7 being produced in the federal repositories.

8 It's just I've done that on other cases, it
9 doesn't work well, and those are all things that
10 provided bounds on what I could fully explore in this
11 particular matter for purposes of this report.

12 Q. These constraints that you mentioned, they weren't
13 imposed actually by my client, TEG, were they?

14 A. No, definitely not.

15 MR. DELANEY: All right. I have no further
16 questions.

17 MR. ROTHMAN: Thank you for your time,
18 Mr. Ferrara.

19 THE WITNESS: Thank you.

20 MR. DELANEY: All right. Have a good day,
21 Joel.

22 MR. ROTHMAN: Yes.

23 I assume he's going to read.

24 MR. DELANEY: Yeah, we'll read.

25 MR. ROTHMAN: And could I get also a phone

CONFIDENTIAL

Page 95

1 number for you, Ms. Goldman?

2 THE COURT REPORER: It's (305) --

3 MR. ROTHMAN: Uh-huh.

4 THE COURT REPORTER: -- 439-1509.

5 MR. ROTHMAN: 1509.

6 Okay. We're going to let you know about the
7 transcript and how quickly we need it, but I don't
8 have an answer for you right now.

9 THE COURT REPORTER: Okay, and do you want a
10 copy, Mr. Delaney?

11 MR. DELANEY: Yes.

12 THE COURT REPORTER: Okay. So it's ordered,
13 but you're --

14 MR. ROTHMAN: Right now, for right now, it's a
15 regular order, but -- you know, regular delivery,
16 but I need a few minutes to think about how quickly
17 I need it and get back to you.

18 THE COURT REPORTER: Okay. No problem.

19 MR. ROTHMAN: Okay?

20 THE COURT REPORTER: Yes.

21 MR. ROTHMAN: Thanks very much.

22 THE COURT REPORTER: Thank you.

23 MR. DELANEY: All right. Thank you, everybody.

24 (Thereupon, the video conference deposition was
25 concluded at 12:29 p.m.)

CONFIDENTIAL

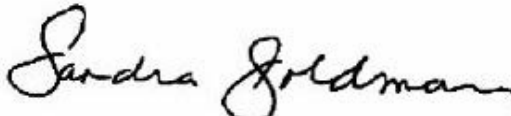
Page 96

CERTIFICATE OF OATH OF WITNESS

STATE OF FLORIDA)
) SS:
COUNTY OF BROWARD)

I, SANDRA GOLDMAN FREDERICKS, Court Reporter
and Notary Public in and for the State of Florida at
Large, certify that the witness, NICK FERRARA, remotely
appeared before me on February 19, 2025, and was duly
sworn by me.

WITNESS my hand and official seal this 20th
day of February, 2025.



SANDRA GOLDMAN FREDERICKS, FPR,
Court Reporter and Notary Public,
State of Florida at Large.

Notary #HH076143

My commission expires: 4/9/25

CONFIDENTIAL

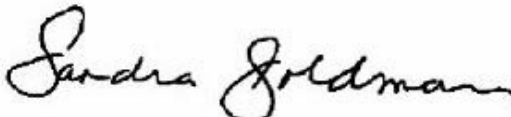
Page 97

REPORTER'S VIDEO CONFERENCE DEPOSITION CERTIFICATE

I, SANDRA GOLDMAN FREDERICKS, Florida Professional Reporter, certify that I was authorized to and did stenographically report the video conference deposition of NICK FERRARA, the witness herein; that a review of the transcript was requested; that the foregoing pages numbered from 4 to 95 inclusive is a true and complete record of my stenographic notes of the video conference deposition by said witness; and that this computer-assisted transcript was prepared under my supervision.

I further certify that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action.

DATED this 20th day of February, 2025.

A handwritten signature in cursive script that reads "Sandra Goldman".

SANDRA GOLDMAN FREDERICKS,
Florida Professional Reporter

CONFIDENTIAL

Page 98

1 Raighne C. Delaney, Esquire
rdelaney@beankinney.com

2
3 February 20, 2025

4 RE: Max Minds vs. Triangle Enterprise Group, et al.
February 19, 2025 - Nick Ferrara - 7182553

5
6 The above-referenced transcript is available for
7 review.

8 The witness should read the testimony to verify its
9 accuracy. If there are any changes, the witness should
10 note those with the reason on the attached Errata Sheet.

11 The witness should, please, date and sign the Errata
12 Sheet and email to the deposing attorney as well as to
13 Veritext at Transcripts-fl@veritext.com and copies will
14 be emailed to all ordering parties.

15 It is suggested that the completed errata be returned
16 30 days from receipt of testimony, as considered
17 reasonable under Federal rules*, however, there is no
18 Florida statute to this regard.

19 If the witness fails to do so, the transcript may be
20 used as if signed.

21 Yours,

22 Veritext Legal Solutions

23 *Federal Civil Procedure Rule 30(e)/Florida Civil
24 Procedure Rule 1.310(e)

25
Veritext Legal Solutions

800-726-7007

305-376-8800

CONFIDENTIAL

Page 99

Max Minds vs. Triangle Enterprise Group, et al.
February 19, 2025 - Nick Ferrara - 7182553

E R R A T A S H E E T

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

PAGE_____LINE_____CHANGE_____

REASON_____

Under penalties of perjury, I declare that I have read
the foregoing document and that the facts stated in it
are true.

NICK FERRARA

DATE

CONFIDENTIAL

[& - 38]

Page 100

&	19 1:13 3:7	2022 68:23	29.1 48:4,4,9,16
& 2:6	96:12 98:4 99:1	2023 44:6 61:2	49:24
0	1:24 1:2	77:1 78:13	29.3 49:25
00 23:1	2	2024 77:8	3
001 5:7	2 3:5 5:9,12 7:7	2025 1:13 5:21	3 3:7 19:21,24
002 5:7	7:10,15,25 8:5	96:12,15 97:18	58:16 65:23
00779 1:2	8:19,23 9:1,16	98:2,4 99:1	83:11
1	10:15,16,18,19	20th 96:14	3.1164 30:1,11
1 3:4 5:8,12,19	10:20 11:1 13:3	97:18	3.3228 82:11
11:1	13:7,15,20,24	21 3:9,11 16:4	3.3228. 82:14
1-10 1:8	14:2 15:6,20	27:20	3.3371. 60:19
1.310 98:24	17:21 19:1	21301 2:4	3.3415 14:11
10 47:20,25	23:21 30:1	22 3:12 42:14,15	3.3415. 13:25
100 2:4	33:17 35:1,9,15	22201 2:7	3.3799 32:18
10:05 1:12	38:4 41:5 44:9	23 68:23,23	3.3806 31:25
11 42:18 52:8	46:24 62:4,5	2311 2:7	3.3806. 31:24
11:21 52:15	65:22 75:17	233 78:19	3.3882. 65:22
11:27 52:17	82:11 83:11	24 44:1 68:23	30 77:3 98:16,23
12 52:23	92:20	24765 13:17	305 95:2
12:29 1:12	20 3:8 17:2 52:8	25 47:7	30th 21:16
95:25	98:2	25th 61:2	31st 5:21
12th 16:12	2011 52:25	26 6:7 19:12	32 57:12
13150 96:19	20165 1:12	47:16 48:8	33 57:16,17 61:3
97:22	2017 31:14	27 47:14 52:19	62:23 63:17
15 3:13 75:4,8	43:14 49:25	52:20	33433 2:4
75:10,20 78:17	2017/2018 78:8	28 47:14	34 57:16,19
1509 95:5	2018 16:12	29 19:12 28:5	60:17 61:9
16 6:17,17 8:4	31:14 43:15	31:9,22 32:16	81:17
19:8	50:1,4	34:13,17 42:1,5	36 58:11
18 16:3,9,16	2019 43:25 44:6	47:11 49:13	38 58:15
17:19 48:17,20	78:12	54:9 55:18 56:4	
68:11	2021 68:23	56:12 76:17	
		29's 19:13	

CONFIDENTIAL

[4 - analysis]

Page 101

4	9	45:24 46:3,24 53:17,18 action 74:7 97:17 activities 64:18 activity 64:24 actual 24:12 48:24 49:4 70:16 actually 13:2 14:5,8 17:4 37:15 44:17 52:11 60:15 65:13 69:18 72:14 86:20 93:25 94:13 add 58:7 76:3 added 5:25 additional 62:8 62:22 76:6 91:5 address 14:24 38:16,24 76:18 addressed 63:5 addresses 15:4 15:9 37:1 38:15 adequately 82:20 admin 11:9 advance 55:4 adversely 62:6 62:20 advice 74:7,17 74:22	advising 74:2 affected 62:7,20 affirmative 59:19 ago 10:5,8 23:6 25:22 agree 90:21 agreed 26:18 agreement 3:11 3:12 21:24 22:17 23:14 agreements 23:12,15 ahead 7:6 85:17 air 93:5,18,23 94:3 al 98:4 99:1 algorithm 84:1 allegation 77:12 allegations 69:22 alleo 69:7 analysis 10:11 10:17 12:9 15:3 19:8 22:10 23:11,13,16,16 25:7,18 26:24 27:8,13,19 29:16,23 33:1,3 38:7 41:18 44:17,22 46:13 46:21 47:8 77:23 93:19
4 2:16 3:8 20:18 20:22,23 72:23 97:8 4/9/25 96:23 40 76:15 77:2,5 42 68:11 439-1509 95:4 45 81:16 46 81:16	91 2:17 92:14 95 97:8 96 2:17 98 2:18 99 2:18 9th 77:8		
5	a		
5 3:4,6,9 21:2,6 21:6 5/10/2024 78:19 5/9/2024 77:6 500 2:7	a.m. 1:12 52:15 52:17 ability 9:17 abisror 2:11 able 12:7 14:7 16:1 24:8 49:3 54:21 94:4,6 above 1:25 5:11 11:20 66:24 98:6 absolutely 71:17 74:5 abstract 32:24 access 9:2 45:21 accessed 70:9 account 38:25 accounts 38:23 accuracy 98:9 accurate 29:2 accurately 81:7 aces 11:3,21,23 12:18 15:23 35:1,2,11,15,17 35:21 36:17 44:4,9 45:5,8,11		
6			
6 3:10 22:20,23 71:20,23 6455 52:24			
7			
7 3:11 21:20,23 71 3:10 7182553 98:4 99:1 75 3:13			
8			
8 3:12 6:16 19:7 22:12,16,19,25 23:1 882 65:24			

CONFIDENTIAL

[analyze - back]

Page 102

analyze 12:8 25:14 analyzed 19:16 analyzing 25:19 angular 85:15 85:18,23 86:1 86:22 88:3,10 88:12,19,22,23 89:15 annotations 89:21 90:17 91:5 answer 7:19 21:8 23:25 24:8 24:15,17 26:20 49:17 56:2 59:19 66:25 68:8 74:13 79:9 81:1 86:15,24 87:14 89:24 95:8 answered 67:21 answers 4:24 anyway 76:2 apart 22:4 87:12 appear 6:3 58:14 appearances 2:1 appeared 96:12 application 50:15,19,21,24 51:20 80:18 84:9 88:13	applications 72:25 85:19 approach 16:21 72:8 81:18 93:12 approaches 70:6 approximately 45:15 april 61:2 architect 33:3 architectural 10:13 19:9,10 24:11,23,25 25:2,18 27:13 28:24 29:6,14 46:21 47:9,12 47:16 52:1 architecture 28:3 29:10 40:13 43:19 44:3,21 46:12 50:25 51:17,19 51:23 53:14 54:1 56:18 area 62:1 argument 88:10 arlington 2:7 arrives 82:24 asked 24:21 25:9,13 41:9 67:3 76:8 asking 4:15 20:9 34:21 72:21	74:20 assembler 66:3 67:19 assert 74:24 assessment 33:1 assisted 97:11 associated 39:18 73:1 assume 88:8,13 94:23 assuming 62:15 90:16,18 assumption 41:18 63:10 attached 6:14 71:24 72:4 75:23 98:10 attachment 7:7 7:10,15,25 8:5 8:19,23 9:1,16 10:15,16,18,19 11:1 15:6,20 17:21 19:1 20:13 23:21 33:17 35:1,9,15 38:4 41:5 44:9 46:24 58:16 75:17 91:16 92:20 attachments 20:5,5,11 28:15 attack 87:8,25 89:4,10	attacked 87:4 attempt 72:2 attention 7:22 attorney 2:8 10:1 97:14,16 98:12 attorneys 2:5 atypical 55:5 authored 24:18 29:14 30:4 66:8 67:4 authoring 64:25 authority 32:9 authorized 97:4 available 21:16 38:7 40:15 41:10 45:25 68:19,21 69:6,8 69:18,23,25 70:3,4,7,18,25 71:4,5,15,16 72:9 89:3 98:6 azure 3:13 75:14,15
			b
			b 2:3 3:1 back 5:2 10:10 12:16 13:18 17:18 18:9,13 18:17 19:5,7 31:15 33:21 36:19 37:25 42:13 43:15

CONFIDENTIAL

[back - change]

Page 103

45:18 52:7 56:1 56:22 59:7,15 60:1 66:20,23 81:6 82:9 86:2 89:13 95:17 backend 11:9 40:7,7 background 27:24 33:3 bad 10:23 17:4 banner 76:20 based 6:11 23:16 27:11 29:16,23 30:24 33:2 36:3 43:18 43:20 63:25 70:9 74:23 84:19 85:8 92:8 basic 92:24 basically 7:13 57:25 69:21 basing 53:16 bates 22:8 23:8 bean 2:6 10:1 11:17 beankinney.c... 98:1 bearing 25:5 beautified 69:13 beginning 5:6,6 17:18 27:19 57:12 68:10 72:22	begins 20:10,22 21:6 behalf 1:21 believe 15:7 22:9 23:5 37:11 37:20 47:23 60:8 90:21 bells 77:9 best 8:23 46:6 better 18:10 28:13 64:7 93:6 beyond 29:22 34:22 79:19 bit 54:19 84:16 board 28:10,25 29:6,10 47:16 50:11,14,18,20 51:9 54:9 56:14 57:1 boards 28:17 boca 2:4 bookmarks 14:5 14:6 bottle 52:10 bottom 6:6 47:20 79:4 boulevard 2:7 bounds 94:10 box 28:7 boxes 28:17 branch 32:9 brandon 2:11 break 22:3 52:4 58:2	broader 17:7 51:6 54:19 broadly 35:12 broken 33:6 broward 96:7 browser 88:1,2 88:9 89:1 build 54:16 65:6 78:20 94:6 building 65:2,3 88:6 built 30:22 57:8 86:1 bullet 17:24 35:9,14,17,18 46:24 button 62:13 c c 2:6 6:22 47:1,5 68:10 69:17 98:1 call 55:18 59:14 61:2 called 4:3 5:9 15:12 19:24 30:1 44:16 54:9 65:16 69:8,13 calling 92:6 campbell 2:2 capital 68:10 caps 83:5 capture 72:25	carried 61:10 case 1:2 5:20 6:4 7:14 8:11,16 8:18 9:13 66:17 67:11 69:2 77:13 87:18 93:11 cases 30:15 83:18 87:17,17 94:8 cause 1:25 15:23 21:16 63:12 91:17 causing 76:22 caveat 55:10 center 30:18 centered 29:10 certain 17:9 23:15 28:16 47:21 certainly 7:20 8:1,21 23:5 31:13 33:24 34:20 36:21 37:19 41:8 43:1 45:18 72:6 73:15 80:18 certificate 2:17 96:5 97:1 certify 96:11 97:4,13 cetera 5:7 change 57:25 62:6 99:4,6,7,9
--	--	--	--

CONFIDENTIAL

[change - combination]

Page 104

99:10,12,13,15 99:16,18 changed 57:24 58:21 59:4 77:21 changes 14:19 17:9 58:1,17,23 62:16,20 69:12 98:9 changing 59:18 characters 16:19 17:12 charlie 17:3 chat 28:18 29:1 51:9 54:10,10 55:21 56:15 57:1 check 5:22 12:16 16:1 22:8 23:9 33:22,25 34:7,23 36:9,19 36:23 37:22 38:11 40:3 47:2 48:21 50:2 59:15 60:1 68:7 75:25 82:7 88:7 90:25 checked 40:14 checking 59:20 choice 53:13 choose 9:14 choosing 70:24 chosen 67:9	chrome 72:10 circular 85:24 citation 19:12 82:7 cite 7:23 47:21 cited 7:21 8:5 18:11,16 23:17 47:25 50:5 54:20 76:17,24 77:2 citing 8:13 16:8 48:20 civil 98:23,23 claim 74:9 claimed 81:14 clare 1:8 3:7,8 19:25 20:22 clarification 86:11 clarify 8:7 71:10 90:24 91:21 clarity 8:17 13:12 22:18 83:3 93:1 clear 13:16 26:7 26:11,17 41:2 48:14,22 81:19 clearly 4:24 client 11:4,9 40:7 43:20 80:21,23 94:13 client's 25:25 26:2 70:11,13	clients 28:14 closer 83:21 code 3:12 10:11 10:17,25 11:2,6 11:7,11,12,12 11:14,16,21,22 12:8,14 14:20 14:25 15:5,7,14 15:15 16:5,9,23 17:3,20 18:3,18 19:15 22:16 23:17,20,21,22 24:1,6,13,18,22 24:25 25:3,6,7 25:10,14,16,20 25:21,25 26:3,4 26:6,8,10,12,13 26:16,25 27:2,6 27:7,10,15 28:10,23 29:17 29:20,23 30:7 31:4,13 32:7,9 33:2,4,8,10,12 33:16,18,22 34:16,21,25 35:2,7,10,25 36:4,5 37:17,19 37:21 38:4,18 39:8 41:4,25 42:4,9,10 43:15 43:21 44:2,3,11 44:16,17,22,22 45:4,19,21 46:8 46:20,22 47:4,8	47:24 48:19,23 49:12 51:25 52:2 55:6,12,14 55:20,21 56:2 56:23 57:4,10 58:18,24 59:5 62:17 64:14,25 65:11,21 66:8 67:4,9,16,17,18 67:23 68:18,21 69:4,12,17,23 70:3,8 71:5,15 73:1,3,4,13 75:7 75:15 77:1,18 78:20 79:12 80:1,15,22,23 80:25 81:3,25 82:9,17 83:6,17 84:2,4,7,8,9,11 84:17,19 85:5 86:3 87:23 88:2 88:24 89:4,6,7 91:3 92:1,6,8,10 92:15 93:3,5,11 93:13 94:1,6 codebases 76:4 codes 41:9 collaborating 64:21 collection 75:14 colon 16:22 combination 51:8
--	---	---	---

CONFIDENTIAL

[combining - consistent]

Page 105

combining 56:11 come 12:2 19:5 24:22 25:10 30:12 31:20 52:7 comes 60:6 comments 33:11 33:18 36:10 52:24 55:15,16 89:21 90:17 91:6 commission 96:23 commit 15:12 15:25 16:20,22 16:25 17:7,8,11 17:12 36:6,16 38:9,16,18 39:22 49:5 commits 15:19 16:4,6,7,21 17:6 34:8 36:8,15 37:2,5,12 38:14 39:7,8 40:8,17 41:14 50:3,4 committed 39:21 40:1 committing 40:18 communicatio... 52:21 compactd 69:15	company 50:19 compare 93:11 compared 44:2 44:2,9,21 comparing 51:4 comparison 24:3,9,14 44:14 45:2 78:7 comparisons 46:1 93:15 compile 89:13 compiler 66:3 67:19 complete 6:19 26:20 97:9 completed 98:15 complicated 67:6 component 18:13 50:23 62:6 components 19:15 28:16,21 29:1,8,21 35:11 43:23 44:20,24 47:6 51:3 54:4 compose 92:10 composes 69:4 composing 70:10 comprehensive 7:24 36:23	compromise 87:13 computer 9:3 11:17 12:1 23:20 24:1,13 24:18 25:1,16 26:5,9,14,25 27:8,12,16 28:11,23 38:23 43:21 44:12,23 45:4,4,20 46:3,4 47:3 53:4,9,10 53:19 66:1,7 67:17 68:2 70:11,13 80:21 80:23 93:4,13 93:18 97:11 computers 78:12 concept 17:14 28:6,25 29:6 47:16 50:11,18 50:20 51:1,8 55:19 56:15 concerning 76:8 concerns 71:8 71:14 80:6 86:8 86:13,18 87:19 88:19 concluded 95:25 conclusion 67:3 67:8	conditions 94:2 conducted 30:10 conference 1:19 2:1 59:14 61:2 95:24 97:1,5,10 confidential 1:17 49:14 81:15,21 91:6 91:10 confidentiality 49:20 69:1 71:9 71:14 81:4 configurations 59:3,18 conflating 27:1 connect 44:24 93:7 connected 28:8 28:14 45:20 54:4 56:13 94:5 97:16 connection 7:17 22:1 connections 54:15 conscience 54:21 considered 7:14 7:16 98:16 considering 24:16 consistent 14:17 14:20 21:14,18
---	---	--	---

CONFIDENTIAL

[consistent - de]

Page 106

32:20 37:23 38:8,11,14 41:14 69:6 77:15 82:16 83:11 consists 56:6 constitutes 56:5 constraint 73:21 93:3 constraints 23:25 24:16,20 27:11 92:1,5,7 93:2,18 94:12 construction 64:14 constructs 46:17 contain 7:15 35:25 38:4,15 90:3 contained 6:10 13:14 14:23 32:16 90:3 content 80:2 context 17:1 25:17 30:14 50:14 70:8 76:6 79:14 83:20 85:20,23 91:11 91:14 contractors 33:20 34:4 contributed 54:13 56:5	57:14 contribution 56:6 control 14:18 93:23 conversation 43:7 conversations 42:19,21,22 43:7 copied 84:10 copies 9:3 12:4 98:13 copy 95:10 core 47:9,12 50:24 56:17 corey 59:5 correct 8:20 11:18,19 12:11 13:4,16 15:2,17 17:25 18:2 27:25 33:12,13 34:19 35:20 36:8,13 39:23 41:23 46:9 47:23 48:11 52:21,22 53:5 53:12,20 56:19 56:24 65:1 67:15 71:1,2 80:14,16 83:19 84:9 86:5 89:18 90:12 91:4	correctly 37:8 38:1 54:24 80:13 85:10 89:16 corroborates 10:12 19:8 counsel 74:4,7 74:18 91:17 97:14,16 county 1:12 96:7 couple 26:1 course 15:3 29:12 59:22 75:12,20 76:7 court 1:1 4:23 6:23 12:23 66:22,24 95:2,4 95:9,12,18,20 95:22 96:9,20 covered 28:4 58:16 65:19 69:17 76:12,14 create 18:24 60:15 69:13,14 80:6,7 85:6 86:7 86:22 88:12 created 53:18 66:14,15 creates 81:3 creating 64:1,10 79:11,12 85:18 89:9	cross 2:17 91:22 customer 63:6 63:10,18,19,24 customers 64:11 76:22 cv 1:2 6:14 cycle 61:15 d data 11:2,7,11 11:12,15,21 23:22 24:13 28:14 33:18 35:10 36:4,6,9 37:24 38:12 43:11 66:1 82:24 83:1 85:8 85:11,14 databases 40:23 date 5:22 15:13 16:24 36:17 68:24 98:11 99:25 dated 5:20 52:25 97:18 dates 15:14,18 15:25 16:7 31:15 50:2 day 45:14 80:9 94:20 96:15 97:18 days 98:16 de 89:13
--	--	--	---

CONFIDENTIAL

[dealing - different]

Page 107

dealing 47:15	delaney 2:6,17	design 27:20	determined
december 52:25	49:15 53:22	29:13 30:1,4,10	28:1
declaration 3:7	63:13 74:6,12	30:21 31:4	develop 25:25
3:8,9,10 19:24	74:15,19 79:8	32:17,21,22	developed 25:15
20:10,21 21:5	91:20,23 94:15	42:9,11 43:19	25:23 26:24
71:24 72:4 74:3	94:20,24 95:10	44:3 47:9,12	27:14,18 31:14
91:16	95:11,23 98:1	48:4,25 49:6,10	32:7,11 34:14
declarations	delivery 95:15	49:12,13,23,24	34:17 37:21
24:4 92:14	demo 11:8	50:11 51:23	38:4 44:6 49:25
93:21	demonstrates	53:4,9 54:12,25	51:16,20 84:17
declare 99:21	47:8 57:17	55:1,7,18 56:7	developer 61:10
deeper 46:19	demonstrating	56:15 59:23	61:25 89:22
defects 57:22	57:22	60:14 64:14	developers 39:6
58:12,14 62:8	depends 84:3	65:11 67:12	developing 6:20
62:22	deposing 98:12	84:13	30:7 43:16,23
defendants 1:9	deposition 1:19	designed 28:2	61:16 64:1,5
2:8	1:24 4:10,16	designing 65:6	development
defined 14:2	52:16 79:1	designs 10:13	10:13 30:13,15
30:10 32:18	95:24 97:1,6,10	19:9,10 27:3,6,6	30:17,20 31:1
definitely 17:16	depository 11:3	27:14,17 32:13	31:21,24 32:4,5
94:14	describe 31:21	32:25 50:7 52:1	42:8 46:18
definition 13:7	87:3	57:5 66:11,14	61:15,20 62:25
13:24 14:4,14	described 32:6	67:14	63:2 64:6,7,8,9
31:23 60:18	55:2 62:22	detail 27:18	64:16,22,24
62:5 64:6,7,23	63:17 80:1	48:17 58:10	65:10,16,17
64:23 65:21	describes 48:8	69:9,20	67:7,25 76:19
66:8 67:18	describing	detailed 30:1,3	94:4
82:16,24 83:17	16:14	30:10,21 32:22	devops 3:13
definitions 13:3	description 3:3	84:3	75:14
13:14 14:17	16:13 18:10,17	detected 60:9	difference 41:23
62:4 66:2 83:11	30:2,4 32:18,22	determine 25:10	41:25 42:4
85:1,4	33:14 48:9 79:3	26:24 34:16	84:21,24
degree 42:10	79:6,21,24	40:8 62:5 87:24	different 40:22
	83:22		42:7 43:19

CONFIDENTIAL

[different - employees]

Page 108

44:20,23,24,25 48:18 49:8,11 65:18 77:5 91:7 difficult 23:24 24:2 direct 2:16 4:6 6:16 directed 43:15 direction 58:21 directions 72:24 73:14 directly 29:24 70:8 directory 82:2 disconnected 56:8 discussed 51:23 91:15,25 discussing 38:7 discussions 74:4 74:6 display 85:21 displayed 76:21 dispute 12:13 distinct 25:19 49:6 distinction 66:10,16,18 distinguish 48:24 distribute 28:8 distributor 61:13	district 1:1,1 doctrine 74:25 document 5:9 14:5 19:20,24 20:1,17 21:1,7 21:19 22:8,11 22:16,18 32:14 32:19 42:15 54:25 55:4,7 71:19 72:9 75:3 78:24 79:7 99:22 document's 22:19 23:8 documentation 31:3 32:24 33:8 33:9 36:10 55:11,14 documentations 29:19 documents 5:11 7:12 8:4 9:7,12 9:14,20,21 10:4 19:19 29:14,22 30:22 32:21 33:7 59:23 60:3 60:14 72:19 75:19 76:16 77:16 92:9 doing 34:15 45:19,22 46:18 59:9 61:14 64:19 68:9	double 5:22 16:10,10,11 37:22 47:2 50:2 download 9:2 72:8 downloaded 12:1 70:11,17 70:22 downloading 70:20 72:6 downloads 70:19 dozen 4:13 drop 47:20 48:16 drywall 65:4 duly 4:3 96:12 e e 3:1,13 9:7 14:24 15:4,9 37:1 38:15,16 38:19,20,24 76:23 79:16 98:23,24 99:3,3 99:3 e4d4aa 16:11,19 earlier 25:2 31:12 32:21 55:10 66:9 78:8 82:10 earliest 40:15 50:3	early 12:12 44:5 easier 35:13 69:14 easiest 7:5 18:22 easily 23:9 27:10 echo 17:3 edward 1:8 effectively 93:5 effort 73:7 eight 35:8,9,14 35:25 37:2,5 38:3 39:22 40:2 46:24 eighth 35:18 either 8:4,19 88:24 element 28:6 48:10 53:4,9 84:1 elements 25:2 28:3 47:9,12 48:5 49:7,11,12 49:14,23,24 52:1 54:8,12,15 55:1,17 85:21 90:25 91:2 94:1 email 98:12 emailed 98:14 employee 36:18 41:14 97:14,15 employees 33:19 34:4 36:22
---	---	--	--

CONFIDENTIAL

[endif - federal]

Page 109

endif 83:1,4 engagement 25:9 43:24 engineer 89:13 engineering 3:5 5:10 13:6,15 52:24 english 83:23 ensure 61:20 enterprise 98:4 99:1 entire 17:8 entirely 80:8 entitled 5:8 entries 40:4,22 environment 94:5 errata 2:18 98:10,11,15 especially 55:5 esquire 2:2,3,6 98:1 et 5:7 98:4 99:1 event 84:6 everybody 95:23 evidence 57:17 58:11 exact 9:10 19:12 68:22,24 78:1 examination 2:16,17 4:6 91:22	examine 15:3 40:8 examined 4:4 11:17 12:1 30:23 example 14:24 16:8,18 17:2,4,7 17:19 29:5 30:15 38:14 42:13 57:16 59:6 61:1 62:5 76:17 81:17 82:23 83:8,9,24 85:6 except 24:22 33:7 55:11 57:4 excuse 34:6 44:15 88:22 executed 21:16 executing 62:25 64:20 executive 6:16 exercise 72:3,13 exercises 72:15 exhibit 3:4,5,7,8 3:9,10,11,12,13 5:8,9,12,19 10:20 13:3,7,15 13:20,24 14:2 19:21,24 20:10 20:18,22,23 21:2,6,6,20,23 22:12,16,19,20 22:23,25 30:1	62:4 65:22 71:20,23 75:4,8 75:10,20 78:15 78:16 82:11 exhibits 5:5 20:6 92:13 exist 89:22 existed 40:13 expect 32:3 expected 82:25 experience 1:7 33:2 expert 3:4 5:8 5:19 6:4,11 7:17 20:2 74:8 expired 76:20 expires 96:23 explain 17:15 explanation 18:18 explore 94:10 expose 82:1 91:7,8 exposed 87:22 89:9 91:15 exposing 81:3 81:24,25 86:20 87:17,18 88:17 88:19 exposure 86:2,8 86:13 expressed 66:2 67:18 86:25	extended 57:24 extent 27:5,9 29:18 60:15 74:13 81:14 90:23
			f
			facility 12:2 fact 14:12 24:1 46:16 53:17 54:19 76:19 factor 87:9,25 facts 66:16 67:10 99:22 fails 98:19 fair 14:9 fairly 12:12 21:10 fall 44:6 78:13 familiar 20:15 far 6:11 55:8 82:4 86:9 faster 82:24 feature 70:12 features 56:7 february 1:13 96:12,15 97:18 98:2,4 99:1 federal 6:20 10:14 44:4,6 45:9,11 47:13 47:21 48:6,8 50:8 51:25 57:18 67:25

CONFIDENTIAL

[federal - functionality]

Page 110

68:21 69:5	72:24,24 76:11	focus 46:12	forward 48:4
76:21 92:6,10	findings 27:22	folder 9:20	found 48:5,10
94:7 98:17,23	fine 14:12 52:6	follow 18:4 73:7	49:12 69:19
ferrara 1:19,25	finish 58:4	73:14	four 11:8,15
2:15 3:4 4:2,8	83:14 86:10	followed 16:22	23:20 35:7 60:8
5:9 6:25 41:24	firm 10:2	follows 4:5	92:18
91:24 94:18	first 4:3 6:17	footnote 16:2,9	fourth 17:24
96:11 97:6 98:4	11:1 15:24	16:16 17:2,19	78:14
99:1,25	16:18,19 26:2,7	47:20,25 48:16	fpr 96:19
figure 51:2	34:25 35:17,25	48:17,20 52:23	frame 68:23
file 5:6 9:8	36:17 37:2,5	76:17 77:3	77:4 86:1
16:11,23 17:9	38:3 39:22 40:2	81:17	framework
18:24 22:21	40:14 42:24	footnotes 7:21	85:18
23:1 69:9,16	44:2 45:3,8	7:24 8:1,5,20	fredericks 1:22
70:20 82:2,2	46:24 47:7,15	13:4 16:3 17:10	96:9,19 97:3,22
89:12 90:2	50:11,18 51:11	18:4 54:20	front 18:23
file's 18:16	51:13,19 53:8	81:17	37:24 69:4 70:9
files 11:25 12:5	76:2,3 83:17	force 52:25	70:10,14,16
16:6 18:20,25	92:8 93:4	foregoing 97:8	78:20 80:6,7,25
29:19 33:13,15	fischer 2:11	99:22	85:19,25
33:19,23,24	51:22	foremost 26:2	full 17:1 18:18
44:18 55:12,15	fit 29:9 46:13	forget 38:24	24:9 79:15
55:16 70:10,15	50:16	68:22,23	fully 94:10
70:19 72:8 73:3	fits 29:6 44:21	forgive 17:13	fun 62:1
80:3,7,11,17,20	five 35:8 52:5	form 43:11	function 28:9
80:23 81:3 86:6	52:13 60:8	49:15 53:22	84:13
86:8,14,21,21	fix 58:1	57:20 66:2	functional
87:19 88:3,9	fixed 59:6	67:19 69:8	93:25
89:19 90:10,11	fl 98:13	88:25 92:17	functionality
90:17 91:8,14	fleshed 84:18	format 12:18,19	18:23 28:19
finalized 43:12	florida 1:1,22	12:20	51:10 54:5,22
find 23:19,22	1:23 2:4 96:6,10	forth 32:24	56:7 57:2,23
24:17 32:15	96:20 97:3,23	72:13	62:2,7,20 69:4
48:18 66:7	98:18,23		69:12,15 70:6

CONFIDENTIAL

[functionality - healthcare]

Page 111

70:16,20,23 71:4,6,7 80:10 80:12,15,19 82:6 86:25 87:2 87:7,15,20,21 89:9 fundamentally 19:14 69:11 further 7:21 17:2 19:19 27:24 28:15 36:9 50:13 51:18 53:12 57:24 58:1,6 68:1,7,9 84:18 91:19 94:15 97:13	generate 88:23 89:6 getting 87:2 girders 65:3 git 12:19,22,23 14:17,22 15:5 15:12 give 10:21 14:3 14:10,14 16:1 18:10,18 19:11 20:23 21:7,12 26:20 31:25 59:19 68:12 78:6 82:12 given 9:2,3,20 11:25 23:25 29:13 38:5 39:6 68:2 74:18 82:23 giving 83:7 gmail 38:25 go 7:6 11:22 12:2,16 18:17 19:5,7,19 22:23 33:21 34:6 36:19 37:25 40:19 42:13 45:24 46:19 47:10 48:2,3,17 56:1 57:12 58:10 59:7,15 60:1 62:12 72:2 72:12 85:17 86:2 88:7	goes 11:3 48:17 72:3 going 4:15 6:14 6:15 12:14 14:10 17:18 22:21 30:20,23 30:25 32:6,8,12 38:19 43:18 44:11 50:13,22 51:6 53:12 55:19 58:12 63:4 64:13,19 64:22 65:12,14 66:16 70:24 80:18,20 82:9 83:23 85:21 86:3 87:2,7,8,10 87:15,22,23 88:1,21,24 89:2 89:3,4,5 90:10 90:14 94:23 95:6 goldman 1:22 6:21 95:1 96:9 96:19 97:3,22 good 4:8,9 94:20 government 76:22 grammatically 83:19 great 4:14,20 5:4,18 6:6 13:23 14:21 52:3,12	group 1:7 98:4 99:1 guess 8:7 35:4 58:8 70:7 91:10 h h 3:1 6:22 99:3 hac 2:3 half 4:18 hand 96:14 handle 4:20 74:7 handled 32:10 hanging 65:4 happen 45:7 happens 30:24 happy 26:8 haptic 6:20,21 10:14 11:8,9,9,9 40:7 44:4,5 45:9 45:11 47:13,21 48:6,8 50:8 51:25 53:19 57:18 67:25 68:21 69:5 76:21 92:5,10 92:17 hard 24:8 hash 17:11,12 hate 85:24 heading 11:6 27:20 healthcare 30:16
g	g 1:8 12:24 gap 93:18 94:3 gapped 93:6,24 general 7:11,19 7:23 8:21 9:19 14:17 16:3 27:21,24 28:20 32:11 35:6 56:23 58:8 59:1 76:14 82:20 84:5 generality 84:20 generally 15:2 17:6 35:10		

CONFIDENTIAL

[hear - interconnect]

Page 112

hear 37:8	75:5	include 33:13	industry 8:13
heard 37:4	identified 58:13	64:13	12:7 30:16
heart 19:15	58:14,15,20	included 20:6	81:20
herren 61:4,6	59:6 74:20	29:19 31:22	info 76:3
hh076143 96:22	92:13	39:3 60:9 70:17	information
high 29:4 54:15	identify 10:16	77:10 80:11	14:23 15:22
83:25	31:6 36:16 44:8	includes 27:23	24:7 28:7 45:25
higher 32:14	73:3	64:24	49:14 70:25
highlighted	identifying	including 19:12	71:4,9,14 79:14
42:6	16:21 34:13	inclusive 67:2	79:18 81:15,21
highlighting	implement 27:3	97:8	82:1 86:6 90:10
5:24	54:5 55:21	inconsistent	90:16 92:24
highlights 6:1,3	65:18	62:23	inherent 49:8
histories 38:10	implementation	incorrect 34:18	52:2
history 33:22	64:15	90:8	initial 40:12,17
34:1 40:4,9,20	implementatio...	index 2:13	43:7 45:16 63:4
40:20 48:22	54:16	indicate 15:13	73:24
hotmail 38:25	implemented	38:15	initially 38:6
house 65:2,3,6	27:15 49:2 50:7	indicated 6:9	53:5
huh 32:1 60:22	54:22 56:18	55:17	input 66:2 67:19
62:18 95:3	57:5 58:18	indicates 6:18	82:25
hundred 34:8	66:11	7:2 63:18	inquiry 75:1
hundreds 40:22	implementing	indicating 14:23	inside 85:8
hypothetical	52:20	indication 18:21	insofar 14:16
91:12	implements	30:9 64:22	24:22 33:7
i	27:6 70:16	77:18 89:11	55:11
idea 27:1 53:3	implication	indicative 59:8	install 43:20
identical 46:9	71:18	individual	instruct 74:12
46:16 87:20	important 51:1	25:20 27:2	instructions
identification	imposed 92:5	66:10	66:1
5:13 19:22	94:13	individuals	integer 85:13
20:19 21:3,21	inaudible 7:22	37:12 39:14	interconnect
22:13 71:21	13:10	42:25 55:6	44:20

CONFIDENTIAL

[international - korman]

Page 113

international 13:19	issues 26:16 63:5 69:1 76:9	90:11,20 91:2,9	20:4 24:4,20
internet 52:24	76:18 77:7	javascript's 80:19	25:17 27:5,12
73:2 94:6	item 14:11 16:8	jeffrey 1:8	29:22 30:14,16
interoperate 28:22	17:20,24 18:5	joel 2:3 94:21	30:21 31:7,11
interoperates 29:7	29:25,25 30:1	john 1:8	31:18 32:23
interpreted 70:13	34:25 47:15	joint 64:8,9,22	33:1,5 34:21
introduce 62:21	68:10 79:15,17	jointly 6:18	36:22 37:15
introduced 62:8	items 11:15	58:13 64:1,5	39:7,11,18 40:1
investigated 87:4	18:11 29:15	66:14	40:24 41:17,18
investigating 73:11	31:6,8,22 32:16	jordan 2:11	42:9,25 45:20
investigation 73:24	34:12,13,17	jph 1:2	45:23 46:10,18
invoking 74:17	35:25 37:2,5	june 16:12	47:24 48:19,23
involve 74:21	38:3 40:2,6 42:1	k	49:3 55:3,8
involved 6:19	42:6 44:8 47:11	keep 15:8,24	58:16,18 59:17
45:1 74:1	56:4,11,13	73:18	59:19 60:8,12
involves 58:9	75:16	kevin 1:8 3:9	60:14 61:18,22
74:6	j	21:5 39:16,20	66:12 68:8,22
iso 13:17,18	j 2:2	41:15	68:25 69:3,5,19
60:20	janna 3:7 19:25	key 10:12 19:9	72:17 74:22
isolated 24:2	january 5:21	19:10 64:15	75:24 76:1,2,19
93:4	21:16	keys 80:2	76:23 77:7,10
issue 26:10	javascript 47:6	kind 39:2 59:9	77:12 79:13,15
58:22 68:18,20	69:9,24 70:4,9	kinds 33:6	82:4 83:22,24
69:2 73:11 74:2	70:10,22,23,24	61:18 64:18	84:21 85:15
74:20 75:7	71:15 80:4,5,11	kinney 2:6 10:1	92:2,22,22,23
76:25 80:4 81:4	80:16 81:5,25	11:18	92:23 93:10
81:4 86:2	84:21,25 85:5,6	knew 36:25	95:6,15
	85:18,25 86:4	know 4:20 5:2	knowledge 6:12
	86:13,18,23	5:15 6:11 7:6	76:4
	87:18 88:18,24	8:9,22 9:6,9,20	knows 74:15
	88:25 89:7,12	10:4 13:20 17:4	korman 2:6
	89:20,23 90:4	17:11,13,15,17	

CONFIDENTIAL

[labeled - make]

Page 114

l	line 14:10 16:13	literally 84:12	40:9,11,11,25
labeled 22:20	16:18 17:11	little 13:12 14:7	41:13 45:18
lack 28:13 93:6	24:21 25:20	29:3 35:4,13	51:4 58:18
lacking 91:10	27:10 44:2 47:7	54:19	67:11 72:23
laid 28:21 29:15	48:24 49:5 67:4	live 65:7	73:16 76:2
31:4	75:1 93:15,15	llc 1:4	77:17 81:19
language 46:23	99:4,6,7,9,10,12	local 38:23,24	looks 5:24 20:15
47:4 83:18,20	99:13,15,16,18	location 12:10	lot 5:25
84:9	lines 25:6,20	logic 70:15	loudoun 1:12
languages 46:23	27:2 46:15,20	77:13,19 89:14	love 52:10
large 1:24 96:11	47:21,25 48:18	89:22	m
96:20	49:2,8 66:10,11	logs 92:25	madam 66:21
larger 50:24	67:9 84:15	long 42:22	made 55:18
55:18	link 9:1 79:16	look 7:10,18	62:16 68:18,20
lays 73:8	linked 55:1	9:15,21 16:18	69:6,7,18 84:8
lead 67:8	links 54:22	17:2 18:9,17	90:8
leading 29:12	list 7:8,16 11:8	31:13,25 32:2	mail 14:24 15:4
legal 26:16	34:25 36:14,20	32:19 37:16,25	15:9 37:1 38:15
98:22	36:23 39:6,13	40:19,25 42:13	38:16,19,20,24
letter 2:18	39:18 92:14,17	45:24 46:5,17	79:16
level 29:4 32:14	92:18	48:2 49:3 52:19	mailed 9:7
33:6 54:18	listed 8:4,19,25	56:1 59:1,7	mails 3:13 76:23
83:25 84:20	10:25 11:10,14	65:21 68:1 72:5	main 11:4
levels 54:15	12:22 14:13	75:8,20 76:8	make 8:22 13:8
license 3:11,12	15:5,19 16:5,22	78:14 79:3	15:8 16:17
21:23 22:16	17:10,21 18:25	80:17,25 81:8	26:20 35:13
76:20	23:21 33:17	82:11 85:13	41:2,21 48:22
licensing 76:3,8	47:11 49:24	87:23,23 88:5	58:1,6 62:1,19
76:18 77:7,13	61:2 69:18	looked 8:18	63:4 65:13 70:6
77:19	75:16 83:25	40:16	70:21,25 71:4,5
lifecycle 30:17	92:20	looking 10:10	81:6,23 85:24
64:16 65:16,17	listing 7:24	25:18,24 27:2,9	86:16 87:12
	18:24	31:2 33:16 34:1	90:25
		34:16 37:1 38:9	

CONFIDENTIAL

[making - morning]

Page 115

making 48:14 57:25 58:23 65:7 69:22,24 70:2,3 71:14,15 management 14:18 75:15 manager 17:22 18:1,5,7 manner 69:12 80:20 manufacturer 63:3 map 73:3 75:7 80:3,7,10,16,17 80:22 81:3,25 maps 69:23 70:3 71:5,16 80:2 86:3 marked 13:7,15 mase 1:8 match 39:7 material 7:13 9:5 23:17 materials 7:4,8 7:16 8:5,10,12 8:15,17,25 36:19,24 55:12 58:19 59:18,20 60:1 79:1 matter 19:4 73:12 87:16 94:11 max 1:4 6:19 10:13 11:6,11	11:14 23:21 43:24 58:21,25 62:16,17 67:24 69:24 72:25 73:10 77:1 78:12 83:8 98:4 99:1 max's 26:6,12 77:14 78:10,11 mean 7:7,25 8:4 8:7 9:19 13:21 14:16 19:10 27:5 34:5,8,19 36:6 38:17 39:14 42:7 43:4 45:13,14,16 46:6 48:1,6 49:18 53:21 55:8 57:4,7 58:8 60:25 62:12 65:2 66:25 68:4 72:6,20 73:15 77:25 78:25 79:10,19 88:21 90:5,24 91:10 meaning 93:6 measures 81:21 mechanism 12:14 media 28:16 29:1 medicare 30:18 medium 9:10	meetings 51:22 memo 71:24 72:3,5,13,16,19 72:21,22,23 memorialize 15:18 memorize 45:23 memorized 40:21 mentioned 82:9 94:12 message 17:7 28:7,17 77:5 84:14 messages 28:8 75:14 metadata 34:9 36:12 38:14 39:2 89:21 90:17 91:5 92:25 methodology 27:24 mid 44:6 78:12 middle 19:7 22:24 midway 16:18 mileage 60:14 miller 2:2 mind 60:7 minds 1:4 43:24 72:25 73:10 98:4 99:1	minification 69:10,10 81:11 minified 69:9,16 69:24 70:3 71:15 72:8 80:4 80:5,11,16 81:5 81:25 86:17,19 86:20 87:18 88:18 89:12,20 89:23 90:11,20 91:3,9 minute 14:3 minutes 23:6 52:5,13 95:16 mischaracteri... 63:13 misheard 10:20 missing 84:16 misunderstood 63:22 mkk 1:2 modified 57:24 moment 5:23 9:11 10:20,21 14:15 16:1 19:6 20:23 21:7 25:22 31:25 32:2 44:15 48:1 68:9,12 78:6 month 45:14 months 10:5,8 43:4 morning 4:8,9
--	---	---	--

CONFIDENTIAL

[motions - okay]

Page 116

motions 20:7 75:23 moving 43:18 mullican 1:8 3:9 21:6 39:16 41:15 43:1 51:21 mullican's 39:20 multiple 15:14 72:15	92:9 necessary 65:15 84:6 93:9 need 7:18 24:13 39:12,16 48:24 62:19 70:22 80:22 88:24 89:3 91:2 93:11 95:7,16,17 needed 45:25 network 45:21 never 56:25 57:2 new 43:23 nick 1:19,24 2:15 3:4 4:2 5:8 96:11 97:6 98:4 99:1,25 nine 35:8 notary 1:23 96:10,20,22 note 15:18 17:1 98:10 noted 16:24 notes 15:8,24 33:11 43:8 73:18 97:9 notice 1:24 number 3:3 13:5 14:11 19:21 20:18 21:2,20 22:8,12 71:20,23 75:4 82:13 92:12,16	95:1 numbered 23:8 97:8 numbers 5:6,12 o oath 2:17 96:5 obfuscate 69:11 object 49:15 53:22 objection 63:13 79:8 91:18 obscurity 81:18 observed 59:12 obviously 8:12 23:5 24:10 27:22 31:17 39:16 56:22 58:17 65:18 69:10 79:16 92:22 93:9 offer 52:9 offered 24:19 49:19 77:11,20 77:22 offering 41:3 offhand 20:8 22:9 36:11 88:5 office 12:9 offices 11:17 official 96:14 oftentimes 30:16	oh 14:8,13 36:16 44:13 54:2 66:12 78:9 okay 4:14,20 6:6,9 7:2,15 8:3 8:17 9:12 11:5 11:14,20 12:6,9 12:18 13:1,20 14:9,14 15:8,11 15:18,22 17:20 17:23 18:3,7,24 19:3,17 20:9,21 21:5,9,11,23 23:1,3,10,12 25:9,22 26:7,18 27:17 28:1,24 29:12,25 31:3 31:20 33:9,15 34:2,12,24 35:17,24 36:3,5 36:14 37:10,14 37:18 38:1,13 39:5,17,20,25 40:6,16 41:2,11 41:21 42:12,17 42:21 43:2,6,8 43:10 44:1,13 45:2,10 46:2,8 46:14 47:3,9,15 47:19,24 48:3 48:16 49:10,22 50:6,9,17 51:8 51:15 52:3,12 52:19,23 53:3
n			
name 14:24 18:24 22:22,23 23:1 38:19,20 39:1,18,20 named 11:3,4 names 5:6 15:4 15:9 37:1 39:6 39:14,21,25 40:17 41:15 82:2 narrow 50:22 51:7 natively 88:3 89:1 nature 30:25 32:10,17 61:22 84:4,4 90:17 91:7 necessarily 29:5 30:6 31:1 39:10 55:5,7 90:19			

CONFIDENTIAL

[okay - particular]

Page 117

53:16 54:8 55:9 55:14 56:3,11 56:20,25 57:9 58:3,23 59:11 59:22 60:3 61:8 62:17 63:23 64:5,6,23 65:25 66:6 67:14,16 68:10,13 70:2 70:22 71:3,8,18 72:2,12 73:7 74:11,16 75:2 75:11 76:1,7,11 77:17,24 78:9 78:14,18,21 79:5 81:2,12,23 82:9,15,16,23 83:10,13 84:6 84:24 85:13,15 86:2,6,12 88:1,8 88:13,15 89:19 90:9,22 91:4 95:6,9,12,18,19 ones 9:15,17,17 11:14,20 92:20 online 69:25 70:3,4 open 5:8,16,17 14:6 operates 19:16 49:1 operation 87:3 opinion 24:10 24:19 41:3	49:10 50:17 53:16 56:4 68:14 69:3 71:25 74:8 81:2 81:2,5,10,23,24 opinions 21:12 22:1,6 26:15 29:13 41:6 49:19 77:11,22 opposed 44:18 74:8 order 39:7 61:20 70:14,15 70:23 80:21 87:24 88:23 95:15 ordered 95:12 ordering 98:14 organization 28:20 38:21 49:1,7 organizational 19:14 original 87:19 88:3,11,19 originally 53:5 outset 51:24 73:12,24 outside 26:16 overlap 70:5 oversimplified 53:24 overview 29:21	own 12:1 22:18 34:9 45:20 46:3 owned 49:14 ownership 26:9 26:15 p p 6:22 p.a. 2:3 p.m. 1:12 95:25 page 2:14,18 3:3 6:7,16 11:1 19:7 20:22 22:24 42:18 48:18 65:11 68:11 72:23 76:2,3 78:14 79:4,19 88:12 99:4,6,7,9 99:10,12,13,15 99:16,18 pages 5:25 97:8 panel 14:7 paper 9:3 66:13 papers 20:4 paragraph 6:17 6:17 8:4 19:7 27:19 28:5 31:9 31:22 32:16 34:13,17 42:1,5 42:14,15 44:1 47:7,11,19 48:4 49:13 52:19,20 54:9 55:18 56:4 56:12 57:12	60:17 61:3,8 62:23 63:17 64:3 68:11 76:14 77:2,5 paragraphs 19:12 parallel 61:5,7 63:9 parameters 74:23 parenthetical 16:13 parenthetically 16:12,24 part 8:14 15:7 20:10 26:23 27:8 29:10 30:22 35:21 50:24 51:3 54:1 54:17 61:15,19 61:25 91:3 particular 16:4 16:6,8,13,20,23 16:24 18:11,16 23:24 25:17 30:8,23 32:9,13 38:21 46:20 49:5,5 50:15 53:13,14 61:17 62:1 64:3 83:14 83:20 84:1,13 85:1,14 92:23 93:12 94:11
--	---	---	--

CONFIDENTIAL

[particularly - prepared]

Page 118

particularly 25:14 40:12 59:8	perjury 6:10 99:21	plaintiff's 3:2 5:12 19:21 20:18 21:2,20 22:12 71:20 75:4	67:24 91:25
particulars 46:19	person 9:24 14:24 25:21,21 36:6,16,18 38:16 66:13 67:5	plan 31:21,24 32:4 60:11	portion 69:6
parties 10:17 12:13 20:6 46:22 51:24 58:13 60:15 64:10,21 76:18 97:14,16 98:14	personal 6:12	plans 32:5 59:25	position 10:12 19:9 21:15,18 25:7
parties' 10:11 47:8	personnel 36:14 58:15	please 13:12 23:2 42:15 66:22 72:24 78:15 98:11	positive 20:16
parts 42:8 44:25 56:21	perspective 87:5	plug 72:10	possibility 59:9 59:11
party 62:24 66:15	pertain 68:25	plural 36:8	possible 7:20 8:1,22 40:15 62:14 90:13 93:17 94:3
pasted 84:10	pertains 25:14	point 4:13,18 16:2,17 28:4,9 35:18,19 36:12 40:10 41:12 48:22 49:9 58:11 63:19 65:8 68:22 70:21 71:25 72:7,15 73:10 74:25 76:12 78:1 81:16 82:5 84:8 90:9	potential 81:13 89:10
path 16:22	phase 30:21	pointed 24:12 24:23 66:9 67:12 77:2,25 78:7 93:21	potentially 15:14 68:25 74:4 87:4 93:23
pc 2:6	phases 30:19 64:15	points 7:23 35:9 35:14 46:24	powerline 2:4
pen 66:13	phone 94:25		practical 94:4
penalties 99:21	phonetic 15:24 59:5		practice 62:14
penalty 6:10	phrase 25:22 28:18 41:19 89:24		prearranged 93:9
people 15:4 36:22 37:1,3,6 38:4,22 40:18	phrased 53:7 89:17 90:6,7		predate 50:7
perfectly 14:11	piece 55:20,21 72:20		predecessor 44:4
performance 62:7,21	pieces 29:9 46:13 50:15		preexisting 41:9
performed 57:18	place 42:22 93:4		premarked 5:12 19:21 20:18 21:2,20 22:12 71:20 75:4
period 31:15,19 45:10,15 69:19 76:25	placed 27:11		preparation 20:1
	places 13:5		prepared 5:20 97:11
	plaintiff 1:5,21 2:5		

CONFIDENTIAL

[preparing - quotes]

Page 119

<p>preparing 7:8 7:17 78:25</p> <p>present 2:9 25:2 27:7 52:1 80:19 91:3</p> <p>press 62:12</p> <p>pretty 12:21 17:16 84:4</p> <p>previous 90:6</p> <p>previously 43:17,22 50:20</p> <p>primarily 33:4 47:5</p> <p>primary 87:8 92:7</p> <p>prior 21:17 22:5 43:24 75:24</p> <p>privilege 74:9 74:17,24 91:18</p> <p>pro 2:3</p> <p>probably 4:18 4:20 7:5 9:5,6,8 18:22 29:3 68:23</p> <p>problem 58:1 58:20 76:22 89:8 90:7 95:18</p> <p>procedure 98:23,24</p> <p>process 30:13 42:8,9 46:6 64:20 67:8 74:1 82:25 88:3,9</p>	<p>processes 32:5 65:19</p> <p>produced 7:14 8:10,15,18,24 9:13 12:15 25:8 30:7 78:12 92:11,19 93:3,5 94:7</p> <p>product 64:11 74:17,25</p> <p>professional 1:22 97:4,23</p> <p>program 14:19 53:5,9,10 85:12 91:2</p> <p>programatically 60:9</p> <p>programming 46:17,23 55:5 83:18,20</p> <p>project 30:8,23 62:25 63:2 64:9 64:19</p> <p>project's 32:13</p> <p>projects 30:24</p> <p>promulgated 30:18</p> <p>protect 81:20</p> <p>protocol 52:21 52:24</p> <p>provide 16:6 18:21 85:21 92:25</p>	<p>provided 9:16 10:12 12:4,12 18:14 19:9 20:14 21:10 24:7 25:3 31:11 36:20,24 37:20 38:6 39:12 51:23 67:24 79:1 92:9 94:10</p> <p>provides 29:20 85:3</p> <p>providing 14:8 22:1,5 63:6 74:21 86:17,19</p> <p>pseudo 24:6 67:23 82:9,17 83:6,17 84:2,4,7 84:8,17,19</p> <p>public 1:23 96:10,20</p> <p>publications 8:13</p> <p>publicly 68:19 69:8 70:7,18 73:1 89:2</p> <p>pudding 57:7</p> <p>pull 87:11</p> <p>purpose 28:21 32:11 51:20 57:21 61:17</p> <p>purposes 54:17 88:13 94:11</p> <p>pursuant 1:24</p>	<p>put 6:2 27:19 38:24 93:7,10</p> <p>putting 65:3,8</p> <p>puzzle 50:15</p> <p>q</p> <p>quality 63:5</p> <p>question 13:8 22:15 23:24 24:15,17 25:5 25:19 26:20 41:20 42:2 48:15 49:6,16 55:24,25 56:9 66:19,20,23 67:2 71:11 72:12,18 74:23 75:18,19 79:24 80:8 86:11,16 86:16,17 88:7 90:6 92:4</p> <p>questions 4:15 4:24 17:17 19:18 22:2 75:9 91:19 94:16</p> <p>quicker 14:7</p> <p>quickly 95:7,16</p> <p>quite 37:9 41:19 49:9 51:7 53:6 70:1 89:18</p> <p>quote 16:10,11</p> <p>quotes 16:5,10</p>
--	---	--	--

CONFIDENTIAL

[r - relevant]

Page 120

r	reasonable	record 6:18 7:2	71:19 75:3
r 99:3,3	98:17	8:3,9,14 11:16	referring 7:3
raighne 2:6 98:1	recall 8:23 9:9	15:9 23:18	8:15 10:16
raised 74:3 80:4	13:1 18:13 20:7	25:15 26:11	17:21 18:5
82:5 91:17	20:15 23:4,7	31:18 39:15	26:13 27:18
rather 17:8	24:4 29:21 30:8	40:1 57:17	35:13 78:23
28:15 34:6 74:8	34:2,3,10 36:11	59:25 64:1	refers 79:11
raton 2:4	37:13 38:9	67:22 76:16	refines 85:10
rdelaney 98:1	39:23 40:4,9,10	83:3 91:21 97:9	reflex 17:14
reaction 74:24	41:13,16 42:25	recorded 66:24	refresh 60:2
read 5:2 11:15	43:4,13 45:13	records 58:19	refreshed 45:18
44:18,23 55:16	47:6 55:25	73:18 75:25	regard 98:18
66:20,23 67:9	59:24 73:10,12	recreate 73:8	regarding 24:11
69:14 89:22	73:15,16,23	recurred 57:23	76:17
94:23,24 98:8	75:24 85:10	redefined 85:22	regression
99:21	receipt 98:16	reduce 54:18	57:19 60:17,18
readily 60:6	receive 8:25	refer 13:5,13,20	60:23,24 61:4,7
reading 2:18	28:14	16:3,4 18:3	61:9,15,21,24
16:15,15 58:4	received 83:1	19:11 26:8	62:4,13 63:9
79:24	recent 20:7 50:4	35:12 36:15	regular 95:15
readme 18:20	75:23	52:23 56:22	95:15
29:18 33:13,15	recently 20:14	57:16,19 81:6	reject 82:25
33:19,24 55:12	21:10 43:3	reference 92:17	related 25:15
55:15,16	recess 52:15	referenced	28:18
really 8:14,15	recipients 3:13	13:18 59:14	relationship
27:13 46:7	recognized	98:6	51:24
79:13,20 81:10	81:20	references 24:5	relationships
94:3	recollection	24:6 59:24	44:19,24
reason 98:10	9:19 12:17 34:6	67:22	relative 97:13
99:5,7,8,10,11	36:2,3 43:14	referred 5:11	97:15
99:13,14,16,17	60:2	8:19 13:17 17:5	relevant 8:2
99:19	recommending	19:20 20:17	18:12 29:20
	74:2	21:1,19 22:11	31:2
		26:12 66:23	

CONFIDENTIAL

[reliability - review]

Page 121

reliability 62:7 62:21 relied 7:8 8:18 22:10 rely 21:11,25 22:6 23:10,12 relying 23:14 remediated 58:13 remember 9:23 10:6 41:1 73:9 reminder 4:22 remote 12:10 remotely 4:17 96:11 remove 80:1,2 removed 77:1 77:18 removing 77:13 render 70:14 88:12 rendering 71:25 81:24 repeat 5:2 13:9 22:3 26:19 53:6 rephrase 24:24 61:5 68:19 repo 15:24 36:7 reporer 95:2 report 3:4 5:8 5:19 6:4,11 7:4 7:9,17,21 8:6 10:10 13:4,13 15:6 20:2 21:12	24:12,24 26:17 27:20 28:4 29:13 35:12,22 41:22 42:16 43:12 50:5 58:16 64:17 65:20 69:10 72:7 76:13 77:11,23,25 81:2,6 82:17 92:21 94:11 97:5 reporter 1:23 4:23 6:23 12:23 66:21,22,24 95:4,9,12,18,20 95:22 96:9,20 97:4,23 reporter's 97:1 reports 60:8 repos 33:16 38:2 39:22 repositories 11:13 12:4,21 12:22 14:22 15:5,19 16:5 18:20,25 23:20 29:24 31:14 33:25 34:9 40:14,21 41:5 41:16 92:12,15 92:16,18,23 93:1,22 94:7	repository 11:2 11:3,7,11,12,15 11:21,23 12:19 13:2,25 14:1,13 14:18,25 15:13 15:15 16:9,23 17:3,20,22 18:4 18:8 23:21 33:18 34:23,25 35:10 36:4,5 37:17,24 38:12 38:18 39:3 40:3 40:19,25 48:2 48:21 49:4 representation 38:5 represented 38:2 requested 92:24 97:7 required 30:22 62:5 81:22 91:1 requirements 31:5,8,12,16,17 32:13 resolve 58:22 resolved 57:23 resources 72:7 72:10 respect 11:20 12:18 15:23 66:6 69:22,24 75:7 81:15	respective 28:5 respectively 5:13 44:7 responding 4:4 response 83:15 responsibilities 64:10 restraints 68:2 result 46:16 58:24 resumed 52:16 returned 98:15 reverse 89:13 reversed 48:11 review 11:17 12:2,7 14:3,14 15:7 20:1 21:7 21:25 22:5 23:19,20,25 24:16,18 25:1 25:16 26:4,9,13 26:25 27:7,12 27:16 28:10,23 29:12 30:3,10 30:21 31:20 32:8,15 34:15 36:4,5 37:23 38:9 44:12,22 45:3,3,4,5,11,11 45:17,19,21 46:2,4 47:3 53:19 59:22 66:7 67:17 68:2 68:9 71:23
--	---	---	---

CONFIDENTIAL

[review - seems]

Page 122

72:25 75:12,21 76:7 78:12 79:1 82:19 92:1,5 93:4 97:7 98:7 reviewed 11:16 22:7 25:3 44:16 45:8 66:7 67:17 75:16 76:16 93:14 reviewing 11:22 36:15 44:17 73:15 revised 15:15 right 4:24 8:8 8:19 10:3,6 13:1 13:21 23:3 25:23,25 31:9 33:10,21 34:14 38:8 40:10 41:5 47:11,22 48:5,7 52:13 53:7,11 54:9 57:6 59:2 61:7,10,20 62:11 67:14 68:12 73:11,17 73:24 74:22 77:4,12,14 79:23 86:4 88:16 89:20,23 89:25 90:15,19 90:20 91:20 94:15,20 95:8 95:14,14,23	ring 77:9 road 2:4 robert 1:8 3:8 3:10 20:21 71:24 rothman 2:3,16 4:7 5:14 6:21,24 12:25 19:23 20:20 21:4,22 22:14 49:21 52:4,7,12,18 54:7 63:15 66:20 67:13 71:22 74:11,14 74:16 75:2,6 79:22 91:19 92:2 94:17,22 94:25 95:3,5,14 95:19,21 rule 98:23,24 rules 98:17 run 61:6 80:21 88:2,9,25 running 44:18 61:4 63:8 70:11 93:22	save 72:10 saving 73:23 saw 21:17 23:6 23:7 31:4 39:20 39:25 48:8 53:17,18 55:15 56:25 57:2 59:14 60:1 saying 25:20 42:14 49:11 51:7,12 53:3,8 54:12,14 56:16 57:14 60:24 61:12 69:21 84:17 85:7 87:17 says 16:19 22:19 61:6,6 63:8 66:1 72:23 76:3 79:17,20 82:24 scope 26:16 41:22 screen 85:21 script 79:11 scroll 10:21 68:12 se 8:14 seal 96:14 search 93:15 second 10:11 20:22 45:9 66:22 79:3 88:8 secrets 69:2	section 11:1,10 27:23 35:16 58:9 64:17 65:19 68:15 69:17 78:2 79:21,25 security 60:10 71:9,14 80:6 81:4,18 86:7,12 86:18 87:5,19 88:18 see 6:25 15:23 17:19,23 30:3,9 31:3 32:3 33:18 33:22 34:1 36:9 36:20 39:16 40:17 46:8 47:17 49:4 51:25 53:1 55:15 59:7,22 60:3 62:8 66:4 73:5 75:13,16 75:19 77:17,18 77:24 83:2 seeing 30:8 34:2 34:3 75:24 seem 29:21 37:12 41:13 56:12 58:17 59:24 73:10,15 74:19 seems 39:23 41:22,24 62:10
	s		
	s 3:1 99:3 safe 35:5 65:7 sake 88:10 salient 7:23 sandra 1:22 96:9,19 97:3,22		

CONFIDENTIAL

[seen - source]

Page 123

seen 20:4 23:4,5 31:7,11,15 33:5 38:22 55:3,8 60:9,12 63:25 67:22 75:12,22 76:23 77:15 78:22,25 select 9:17 send 28:14 sent 5:5 9:1,8 14:6 23:6 sentence 6:17 10:11 61:8 separate 24:10 56:6 sequence 48:25 49:7 served 73:1 servers 70:18 serves 28:9 serviceable 46:7 services 30:18 set 9:21 64:16 73:13 85:3,20 91:11 sets 24:13 32:24 72:13 93:13 seven 35:8 several 10:6 28:3 62:3 91:25 share 64:10 shared 64:13 sharing 9:8	sharp 47:5 sheet 2:18 98:10 98:12 show 69:15 78:1 94:1 shown 80:5,15 side 9:13 24:2,2 24:9,9,14,14 70:13 93:14,14 sign 98:11 signature 2:18 6:6 96:19 97:22 signed 98:20 similar 57:20 67:14 similarities 24:11,23,25 67:12 68:5 93:16 simon 3:10 71:24 72:3,19 73:8 92:9 simon's 74:3 91:16 simple 66:19 simply 82:5 simultaneously 45:2 single 28:6 sinnk 61:4 sit 9:11 34:10 39:23 40:4 48:1 56:1 73:17	site 9:9 sitting 34:2 41:3 74:22 77:9 six 10:4 16:19 17:12 35:8 skip 6:15 small 55:6 software 3:5 5:10 6:20 10:14 13:6,14 18:14 28:15,21 30:13 30:15,17 31:21 31:24 32:4,5,6 32:11,17 35:11 35:15,21 36:17 40:1,13,18 42:8 43:16,21,24 44:5,6,25 45:3,9 45:12 47:13,14 47:22 48:5,6,9 48:10 50:8,12 50:19,21 57:19 59:10 60:14 61:13,13,16 62:16,25 63:2,3 63:19,24 64:2 64:11,16 65:10 65:16,17 66:6 67:7,16,25 68:21 69:5,7 70:7 76:9,20,21 76:23 77:14,19 78:8,10,11 87:3 93:24	software's 61:19 software's 61:10 solutions 98:22 somebody 62:12 67:3 83:7 85:12 87:11 89:3,6 somebody's 87:22 sorry 7:6 10:18 10:20,22 17:4 35:8 37:7 42:2 48:13 65:23 71:10 75:18 78:10,16,23 82:12 83:16 93:22 sort 7:24 9:8 12:13 14:16 27:1 32:20,24 40:24 43:11,16 46:18 56:17 58:9,21 59:23 61:25 64:15 69:16,19 73:21 73:22,23 83:24 83:25 84:12 85:3,24 91:11 sounds 64:24 source 3:12 10:11,17,25 11:2,6,7,11,11 11:12,14,16,21
--	--	---	---

CONFIDENTIAL

[source - submission]

Page 124

11:22 12:8,14 14:20 16:5,9,23 17:3,20 18:3,18 19:15 22:16 23:17,19,21,22 24:1,12,17,25 25:3,14,16,20 25:21,25 26:2,4 26:6,8,10,12,13 26:15,25 27:2,6 27:7,15 28:7,10 28:23 29:20,23 30:7 31:4 32:7,9 33:1,4,8,9,12,18 33:22 34:20,25 35:2,6,10,25 36:4,5,12 37:17 38:18 39:8 41:4 41:25 42:4 43:15 44:2,3,11 44:22 45:4,19 45:21 46:8,22 47:8,24 48:19 48:23 49:12 52:2 55:12,14 56:23 57:4,10 58:18,23 59:5 62:17 64:25 65:11,21 66:7 67:16,17,18 68:18,21 69:4 69:12,23 70:2 71:5,15 73:1,3,3 75:7,15 77:1	79:12 80:1,2,7 80:10,15,17,22 80:23 81:3,25 84:9 86:3 92:1,6 92:8,10,15 93:11,13 94:6 source's 80:2 southern 1:1 speak 42:24 43:2,3 speaking 90:14 specific 9:5 11:24 16:2,6 17:8 25:6 27:22 30:19,25 32:12 35:4 54:15,16 54:21 57:21 66:16 67:10 81:9,10 83:18 84:3,15 85:7,11 86:4,7 94:1 specifically 10:4 20:9 31:16 34:22 35:13 45:13 56:2 78:23 specification 60:4 specifications 59:23 specifics 9:9 19:6 34:10 40:10 41:16 73:13,17 78:6	specifies 54:25 src 16:11 sriplaw 2:3 ss 96:7 stable 62:2 stand 94:4 standard 12:7 13:5,19 60:20 standards 8:13 standpoint 56:7 start 6:15 17:12 41:8 42:24 49:19 started 51:24 starting 11:21 41:12 starts 11:2 state 1:23 96:6 96:10,20 stated 81:7 92:2 99:22 statement 83:7 89:11 91:4 statements 46:8 states 1:1 static 44:16,22 statute 98:18 stenographic 97:9 stenographica... 97:5 step 72:18,19,24 72:24	steps 64:20,21 65:5,8,15 67:7 73:2,7 sticker 22:19,21 stood 93:24 store 14:19 stored 28:17 32:7 85:8 story 78:19 straight 23:16 streaming 28:19 51:10 54:10,10 55:22 56:15 57:2 strictly 90:14 string 85:14 stringent 81:21 85:3 strip 78:19 80:1 structural 84:1 structurally 91:1 structure 48:25 49:7 85:22 structured 84:25 structures 82:3 stuff 8:22 90:18 subcomponents 19:13 subject 78:19 submission 15:12
---	--	---	--

CONFIDENTIAL

[submitted - teg's]

Page 125

submitted 6:4,9 14:25 15:15 submitting 15:5 subparts 28:5 subsequently 15:14 45:5 substantial 68:5 suggested 98:15 suggesting 56:12 suitable 66:2 67:19 suite 2:4,7 summarize 7:5 18:22 68:14 82:21 summarized 54:14 summarizing 28:24 summary 6:16 18:10,21 supervision 97:12 support 36:10 suppose 45:16 sure 4:25 10:24 12:21 13:8,22 19:4 20:3,15,24 21:17 22:7 26:20 37:9 39:24 41:7,21 44:10 48:14 52:10 53:6	57:25 58:5,6 59:13 62:1,19 63:4 65:7,13 68:16 71:17 76:10 79:18 80:8 81:6,23 82:19 85:16 86:10,16 88:6 90:25 switchboard.c... 16:11 sworn 4:4 96:13 system 9:3 27:4 29:7 33:3 43:18 43:20 44:20 49:1 50:25 51:3 51:16 56:21 57:18,20 59:3 59:10 62:1,6 75:15 93:18,23 94:3 systems 3:5 5:10 13:6,14,18 54:5 93:7	84:7 89:12 taken 1:21 4:10 4:16,17 52:15 talk 4:22 13:2 33:9 52:20 55:19 58:17 59:17 60:17,23 61:4 talking 8:3,9,10 26:4,11 27:9,14 27:17 31:8 33:11 35:7,15 39:3 48:23 50:14 53:14 60:20 61:1 63:7 63:8 64:3 72:20 77:4 78:3,17 79:7,10 83:6,7 87:5 task 52:25 tasks 63:1 64:13 team 55:6 technical 6:19 17:13,16 19:4 22:10 23:11 61:9,18,21 63:1 64:13,20 technique 44:16 69:11 81:14 technology 14:19 28:13 53:13 teg 6:18 11:2,11 11:21 16:4,9	17:3,19 18:3 23:23 24:18 25:3,15,22,24 26:24 27:5,15 27:18 28:1 29:15 30:4 31:5 31:23 32:17 33:17,19 34:4 34:14,17,21,25 35:3,10 36:1,14 36:18,22 37:3,6 37:12,20 38:4 39:6,9,19 40:18 41:3,4,14 42:1,5 42:20 44:3 47:13 48:10 49:14 50:10,17 51:11,20 53:8 53:18 54:13 55:19 56:5 57:14,18 58:15 58:20,21,23 59:4 60:4,5,5,24 63:10,19,23,23 66:8 67:20 68:20 69:22 70:2 73:2,9 74:2 74:18 77:13,18 83:7 94:13 teg's 19:8 21:15 21:18 41:9 48:5 52:2 53:3 56:6 56:15 78:8
	t		
	t 3:1 6:22 12:24 99:3,3 take 7:18 15:18 31:25 32:2,19 42:13,22,23 43:8 52:4,13 65:21 72:5 75:7 78:14 79:3 81:8		

CONFIDENTIAL

[teg's - together]

Page 126

teg's 10:12 44:4	98:8,16	82:1 89:19 90:3	86:24 87:14,21
tell 10:3 18:8	testing 57:13,15	90:18 91:5,6	89:18,24,25
37:15 79:20	57:18,19,20,21	93:25 94:2,9	90:2,6,7,14
85:17	58:9,12,24	think 4:13,19	91:14 92:14
telling 43:13	59:10,25 60:11	6:5 7:11,13,19	93:20 95:16
template 85:15	60:17,18,23,24	8:21,24 9:6,7	thinking 93:20
85:20,23,25	61:7,9,15,24	10:3 11:10	third 82:25
templates 86:22	62:1,4,5 63:9	12:11,12 13:9	thought 37:4
88:4,10,12,20	64:2,4,15 65:7	15:10 19:2	three 29:1,15
88:22,23 89:15	73:20 94:1	20:13 21:8,10	31:5,22 32:16
ten 23:6	tests 61:19,24	21:14,15,17	34:13 35:7 40:6
term 14:1,2	text 48:25 49:2	22:2 23:11,14	42:1,5 49:13
17:14 28:13	49:5 66:10,11	23:15 24:19,20	54:8,11 55:1,17
35:22 82:17,21	thank 5:18 6:23	27:1,12 29:9	56:4,6,11,12
84:5 93:6	26:22 42:12	30:5,14 31:15	throw 17:14
terms 13:7,14	91:24 94:17,19	31:18 32:20	time 14:20 25:8
14:6 24:12 25:6	95:22,23	33:21 34:19	31:19 37:3
27:14 31:7 32:7	thanks 52:14	36:8 37:11,23	40:15 45:6,10
32:23 56:23	95:21	38:6,8,8,10,10	45:15 51:19
57:15 58:19	theoretically	38:13 40:11	52:16 68:3,22
60:11 69:15,17	62:13	41:15,20,23	68:22 69:19
69:18 71:3,6,8	thereof 69:6	43:9,25 47:1,5	73:21 76:24
71:13 72:6 85:1	thing 40:24 47:2	48:11 49:19,25	77:4 82:12
88:18 91:11	61:25 68:20	50:4,13 51:13	94:17
93:19	69:2,23 84:14	51:19 56:10,17	times 4:12,18
test 59:23,25	87:10,15 91:21	56:18,23 63:22	38:22
60:3,4 61:9	93:17,20	63:23 64:17	today 5:20 34:3
62:13 65:13	things 7:20 8:1	66:25 67:2,21	40:5
testified 4:4	24:24 26:1	67:22 72:7	together 29:9
51:22	32:10,13 34:14	73:20,20 74:24	44:21 46:13
testimony 24:6	41:2 54:23 59:3	75:23 76:12,14	50:16 51:10
50:10 55:10	59:4,17 60:10	77:15,20,22,25	54:23 55:1 56:5
63:14,22 67:23	64:14 67:23	78:25 82:5,6,20	57:2 61:5 63:9
82:18 91:24	68:5,18 72:9	85:16 86:5,15	

CONFIDENTIAL

[told - use]

Page 127

told 53:18 tools 12:7 93:10 top 11:1 15:6,20 17:21 18:25 33:17 35:1,9,14 38:3 41:5 totally 83:19 88:6 towards 36:12 trade 69:1 training 33:2 transaction 17:22 18:1,5,7 transaction.m... 16:10 transcribed 61:3 transcript 62:15 95:7 97:7,11 98:6,19 transcripts 98:13 transfer 80:22 transferred 80:21 translated 91:3 translator 66:3 67:20 transmission 9:10 28:13 triangle 1:7 98:4 99:1 triangleexperi... 38:17	tried 35:12 true 7:11 8:21 13:13 97:9 99:22 truth 6:11 try 4:22 7:23 68:1 87:24 89:4 trying 16:17 35:23 36:25 37:4 41:1 51:2 56:3 70:21 76:18,23 turn 10:15 84:8 turning 68:10 two 17:5 22:2 28:25 35:7 49:23 51:5 54:5 82:1 92:7 93:2 type 50:18,20 81:18 85:8,11 85:14 types 28:16 82:2 85:2 typescript 84:22 85:3,10 86:3,6,8 86:19,20,21,21 87:19 88:3,6,9 88:11,19,22,23 89:14,19 90:2,9 90:16 91:8 typical 16:21 63:2 64:18 65:15 93:12	typically 17:10 30:12 32:5,14 39:1 40:25 61:9 61:14,14,23 62:24 64:10,14 79:11 81:22 82:21 84:25 85:20 94:5 u uh 32:1 60:22 62:18 95:3 ultimately 43:11 57:8 58:20 64:11 67:1 71:6 76:25 87:8,15 88:21 89:2,5 under 6:9 11:6 11:10,14,20 23:21 27:20 33:17 35:9 73:2 97:11 98:17 99:21 underlying 27:3 43:23 70:19 89:14 understand 5:1 13:8 20:12 25:4 36:25 37:4 38:1 40:12 41:21 42:19 43:19 51:2 54:24 55:24,25 56:3,9 66:18 68:17,20	69:1 79:6 80:8 80:12 86:15,16 89:11,16 understanding 14:22 15:1,11 15:16 21:15,18 23:15 25:11 26:9 34:5,12,15 34:20,24 35:2,6 35:24 36:21 37:19 41:8,17 48:3 51:21 60:25 82:21 understood 24:15 44:19,19 63:16 69:21 91:13 united 1:1 unquote 16:12 upfront 60:16 upstream 42:9 89:5 use 23:1 28:12 28:25 29:1 38:22 50:11,18 51:9,9,11,14 53:4,8,17,19,25 53:25 54:25 55:20 56:14 57:1 70:24 76:23 80:4 81:13,17 82:17 84:5,12 88:11 88:21
---	---	--	---

CONFIDENTIAL

[used - work]

Page 128

used 9:10 10:13 12:5 14:19 25:22 27:3 28:7 28:16 47:9 50:20 56:5 72:8 72:10,11 82:22 86:22 88:2 94:2 94:2 98:20 user 3:11 21:23 61:13,22 62:10 62:24 70:25 71:2,5 78:19 users 28:8 uses 81:13 using 14:1,2 30:17 35:22 44:16 51:16 66:8,14 84:7,19 85:2,4,12 86:1 86:22 usually 39:2 utilize 70:23	verbatim 84:15 verbiage 83:14 verify 98:8 veritext 98:13 98:22 veritext.com 98:13 versa 90:4 version 14:18 40:12 43:16 59:5 versions 44:5 versus 27:3 71:15 87:18 89:7 vice 2:3 90:4 video 1:19 2:1 28:18 29:2 35:18 51:10 54:10 55:21 56:15 57:1 95:24 97:1,5,10 videos 59:14 view 63:19 71:13 73:3 79:17,25 80:3 86:12 87:20 88:2,17 vii 64:17 virginia 1:12 2:7 vis 25:16,16 vjoc 11:4 40:7,7	vocabulary 3:6 5:10 13:6,15 29:25 vs 98:4 99:1 vulnerabilities 60:10	websockets 28:12,25 51:9 52:21 53:4,9,17 53:19,25 54:1,2 54:3,9 55:20 56:14 57:1 wednesday 1:12 weeds 24:21 weeks 45:16 went 45:18 whatnot 67:24 wilson 2:7 withdrawn 50:9 71:18 witness 2:14,17 2:18,18 4:3 12:23 49:18 52:6,10 53:23 66:25 79:10 94:19 96:5,11 96:14 97:6,10 98:8,9,11,19 word 64:6 words 7:12 9:1 25:24 50:9 56:14 60:4 72:22 80:5 83:4 work 6:19 32:8 51:3 63:4 65:14 70:15 73:12,24 74:17,25 79:15 79:17 84:10 87:10,12,24 89:5 94:9
v		w	
v 1:6 variable 85:1,2 85:7,7,12 varies 9:5 84:19 various 3:13 7:4 58:14 61:18 67:24 77:16 vary 60:15 85:8 vendor 63:3 64:19	view 63:19 71:13 73:3 79:17,25 80:3 86:12 87:20 88:2,17 vii 64:17 virginia 1:12 2:7 vis 25:16,16 vjoc 11:4 40:7,7	want 6:16 9:18 19:18 28:18 41:21 48:22 52:4 65:6 75:9 81:23 87:12 91:20 95:9 wanted 9:17 58:6 water 52:11 way 7:5 18:22 22:9 25:7 37:16 41:19 45:6 46:10 49:20 53:7 59:20 65:2 65:10 67:2 86:7 86:25 87:12 88:24 89:17 90:6 ways 65:18 93:12 we've 30:22 93:9 web 35:18 43:18 88:1,2,8,12 89:1 website 72:7	

CONFIDENTIAL

[worked - à]

Page 129

worked 6:18	18:15 42:3,7
39:9 40:18	46:6 49:18 58:8
44:23 70:12	60:21 66:25
working 10:1	71:12 74:5
37:3 41:4 43:15	82:20 87:22
43:17,22,22	94:24
55:6 61:16 85:4	year 45:14
93:11	z
works 61:20	zoom 4:17
write 42:10 55:7	à
65:11,12,12	à 25:16
writing 41:25	
42:4	
written 23:22	
25:21 31:5,12	
31:23 32:16	
33:19 34:3,21	
35:2,25 39:8	
46:25 47:2,4	
55:4 60:4 67:18	
67:20 83:21,22	
wrong 41:24	
63:21	
wrote 34:1 41:4	
44:3 47:24	
48:19 49:4 60:5	
66:13 67:3	
x	
x 3:1	
y	
yeah 6:1 8:7	
12:21 13:11	
14:8 16:15	

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.